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ABSTRACT

This is a report of hearings on December 16 and 17, 1981, before the Subcommittee on Elementary, Secondary, and Vocational Education of the Committee on Education and Labor, House of Representatives, to extend the authorization of appropriations under the Vocational Education Act of 1963. The focus is the issue of sex equity in vocational education, especially the impact of the 1976 Amendments as regards accomplishments and problems that remain. Testimony includes statements and prepared statements, letters, supplemental material, etc., from over 30 individuals representing the National Commission for Employment Policy; American Vocational Association; National Advisory Council on Women's Education Programs; National Advisory Council on Vocational Education; California State Department of Education; New York State Department of Education; American Civil Liberties Union of Georgia; League of Women Voters; National Commission for Employment Policy; Southeastern Public Education Program, Columbia, South Carolina; Lawyers' Committee for Civil Rights Under Law; Connecticut's Permanent Commission on the Status of Women; Division of Vocational-Technical Education, Department of Education, New Hampshire; Coalition for Equal Vocational Opportunity; Full Access and Rights to Education Coalition; Project on Equal Education Rights; and Displaced Homemakers Network, Inc. (YLB)

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HEARINGS ON REAUTHORIZATION OF THE VOCATIONAL EDUCATION ACT OF 1963

Part 11: Sex Equity in Vocational Education

HEARINGS
BEFORE THE
SUBCOMMITTEE ON ELEMENTARY, SECONDARY, AND VOCATIONAL EDUCATION
OF THE
COMMITTEE ON EDUCATION AND LABOR
HOUSE OF REPRESENTATIVES
NINETY-SEVENTH CONGRESS
FIRST SESSION
ON
H.R. 66
TO EXTEND THE AUTHORIZATION OF APPROPRIATIONS UNDER THE VOCATIONAL EDUCATIONAL ACT OF 1963

HEARINGS HELD IN WASHINGTON, D.C. ON DECEMBER 16 AND 17, 1981

Printed for the use of the Committee on Education and Labor

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HEARINGS ON REAUTHORIZATION OF THE VOCATIONAL EDUCATION ACT OF 1963

Part 11: Sex Equity in Vocational Education

WEDNESDAY, DECEMBER 16, 1981

House of Representatives,
Subcommittee on Elementary, Secondary,
and Vocational Education,
Committee on Education and Labor,
Washington, D.C.

The subcommittee met at 9:32 a.m., in room 2175 of the Rayburn House Office Building, Hon. Carl D. Perkins (chairman of the subcommittee), presiding.

Members present: Representatives Perkins, Miller, Kildee, Goodling, Erdahl, and Petri.

Staff present: John F. Jennings, counsel and Nancy Kober, legislative specialist.

Chairman Perkins. Would all the witnesses please come forward, Ms. Foxx, Dr. Brenner, all the rest of you?

The Subcommittee on Elementary, Secondary, and Vocational Education is continuing hearings this morning on the reauthorization of the Vocational Education Act. Today and tomorrow, we will be focusing on the issue of sex equity in vocational education.

These will conclude our vocational educational hearings for this year. We will resume these hearings next year.

The 1976 amendments to the Vocational Education Act included several provisions intended to eliminate sex bias and sex stereotyping in vocational education. Among these provisions are requirements for a vocational sex equity coordinator in every state, for representation of women on state advisory councils, and for each state to spend $50,000 of its federal vocational educational grant on sex equity personnel.

In addition, the amendments authorized federal funds to be used for development of nontraditional occupational programs, nonbiased instructional materials, and other projects to overcome sex bias.

This morning, we have a knowledgeable panel of individuals who, we hope, can tell us what the impact of the 1976 amendments has been, including what has been accomplished and what problems remain.

We are also interested in knowing any recommendations the witnesses have for improving the authorizing legislation.

We will commence with you, Ms. Foxx, first. Go ahead.

STATEMENT OF VIRGINIA FOXX, VICE CHAIR, NATIONAL ADVISORY COUNCIL ON WOMEN'S EDUCATIONAL PROGRAMS, ACCOMPANIED BY CHRISTINE LONG, MEMBER, NATIONAL ADVISORY COUNCIL ON VOCATIONAL EDUCATION

Ms. Foxx. Good morning, Chairman Perkins.

I am Virginia Foxx of Banner Elk, N.C. I am instructor of sociology and assistant dean of the General College at Appalachian State University and chair of the Watauga County Board of Education.

As Vice Chair of the National Advisory Council on Women's Educational Programs, I am pleased and honored to have the opportunity to present to this subcommittee the Council's concerns related to reauthorization of the sex equity provisions of the Vocational Education Act.

Also with me here today is Christine Long, a member of the National Advisory Council on Vocational Education, which co-sponsored this study with us, which has been given to the subcommittee.

Ms. Long. Mr. Chairman, I am Christine Long of Chicago, president of C. J. Communications Services, a management consultant firm. I am the designated liaison person between my council and the National Advisory Council on Women's Educational Programs. For that reason, I have been involved in the sex equity study. I am pleased to join with Virginia Foxx in this presentation to the subcommittee.

Chairman Perkins. Without objection, your prepared statements will be inserted in the record.

[The prepared statements of Virginia Foxx and Christine Long follow:]

PREPARED STATEMENT OF VIRGINIA A. FOXX, VICE CHAIR, NATIONAL ADVISORY COUNCIL ON WOMEN'S EDUCATIONAL PROGRAMS

Good morning, Chairman Perkins and other members of the Subcommittee. I am Virginia Foxx, of Banner Elk, North Carolina, Instructor of Sociology and Assistant Dean of the General College at Appalachian State University, and Chair of the Watauga County Board of Education. As Vice-chair of the National Advisory Council on Women's Educational Programs, I am pleased and honored to have the opportunity to present to this Subcommittee the Council's concerns related to reauthorization of the sex equity provisions of the Vocational Education Act. Also with me here today is Christine Long, a member of the National Advisory Council on Vocational Education which co-sponsored this study with us.

Mr. Chairman. I am Christine Long, of Chicago, President of C/J Communications Services, a management consultant firm. As the designated liaison person between my Council and the National Advisory Council on Women's Educational Programs, I am very pleased to join with Virginia Foxx in this presentation to the Subcommittee. Because of a mutual concern regarding sex equity in vocational education, and clear responsibilities under our separate statutes, our two Advisory Councils pooled resources through a Joint Task Force, to examine whether the sex equity mandates of the vocational education legislation had resulted in equal access. All current members of the Committee on Education and Labor were sent copies of the report earlier this year, and it is being submitted for the hearing record.*

The findings are listed in the report's executive summary (Appendix A), and we will not reiterate them here. The National Advisory Council on Vocational Education has submitted a written statement as well, including more recent data regarding the continuing needs of women for quality vocational education and for concerted efforts to insure them equal access to such opportunities. Ms. Foxx will summarize some aspects of the report which are particularly significant for reauthorization of the law and we would both be happy to answer any questions you may have afterward.

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* Increasing Sex Equity: The Impact of the 1976 Vocational Education Amendments on Sex Equity in Vocational Education, Report of the National Advisory Council on Women's Educational Programs and the National Advisory Council on Vocational Education, Washington, D.C., by the Institute for Women's Concerns, December 1980.

The National Advisory Council on Women's Educational Programs was established to advise Congress and Federal officials regarding the educational needs of women. As a top priority, we have supported programs and policies to increase educational options for women and girls based on their interests and aptitudes rather than on "expected" sex-related roles. We brought these same concerns to our examination of the 1976 sex equity provisions for vocational education. As you know, these provisions of the law are the result of the extensive and compelling testimony before this same Subcommittee in 1975 which documented the serious inequities for women in access to and benefit from vocational education.

Since 1975, the litany of reasons why women need education for more varied and better paying vocations has begun to seep into the consciousness of this nation. But -- the facts remain quite shocking:

- Nearly two-thirds of all women in the labor force in 1979 were single, widowed, divorced, or separated, or had husbands who earned less than $10,000.
- The average woman worker still earns only 59 cents for every dollar that a man earns, even when both work full time, year round.
- In 1979, half of all poor families were headed by women, compared to only about one third of such families in 1969.
- Black teenage girls have the highest unemployment rate of all workers, male and female.
- Hispanic women have the lwoest median income of all workers, male and female.

The pertinent question is, have these sex equity provisions been effective in improving the educational lot of women. The answer is, yes, they have made a good start. Our study showed that these serious needs are being addressed; however, the pace is slow and uneven. Much remains to be done in righting the balance of vocational education provided to women and men. Both Councils strongly recommend that continued national, state and local efforts are essential to eliminate sex discrimination, bias, and stereotyping; and to insure the progress necessary for women and the country as a whole.

ENROLLMENT CHANGES

The most important evidence we found that the sex equity provisions are achieving their intended purpose is that nationally the enrollment of women is increasing in vocational programs other than those which traditionally have been taken by women. (See Appendices B & C.) The enrollment of women in courses which have been predominantly male, such as Forest Technology, was up 2 percent since 1976, to a total of 11 percent in 1978.

Enrollment of women in the so-called "mixed" programs, those not characterized by a predominance of either men or women, such as Computer Programming, is also up -- by 4 percent, reaching 56 percent in 1978. And I would like to stress here that these increases occurred in only two years. We will be analyzing the 1980 enrollment data as soon as they are available and expect to find that the representation of women in such programs has continued to increase.

Adding to the significance of these percentage changes is the fact that the number of women enrolled in vocational education was also expanding quite rapidly. As a result, women are now 46 percent of all students enrolled in vocational education. Nationwide, women are increasingly taking advantage of the opportunities offered by vocational education, and they are beginning to train for a broader range of jobs than they have in the past -- jobs that offer substantial challenges and salary potential.

Our study found encouraging progress at the state and local levels as well. We analyzed the state plans, annual reports, and enrollment data from 15 states (representing over half of all the United States vocational education enrollments.) We found that in several states where state plans required goals and timetables, plans from the local education agencies for increasing sex equity, and specific assurances that such plans would be achieved, there was a concomitant increase in the number of women enrolled in non-traditional programs. The greatest gains were in states with detailed plans for the eradication of identified sex equity problems -- plans which extended beyond a mere rehashing of the verbiage of the law and regulation. In short, it appears that the achievement of sex equity requires not only the commitment of funds but also the establishment of a system that requires, as well as encourages, such planning activity.

Our study showed that many of the sex equity activities "allowed" but not mandated by the 1976 Act were not funded by the states. Even more disturbing, many of the mandated activities were not funded or not fully implemented. Some states did not even spend all of the $50,000 specifically allocated to the work of the full-time sex equity personnel.

The Council also recently completed a report on Title IX of the 1972 Education Amendments which contains numerous accounts of sex equity progress in vocational education at the local level. We are submitting that report for the record as well.*

1. Based on our research and regional public hearings, the Council recommends, first and foremost, that sex equity must continue as a major purpose in the reauthorized Vocational Education Act. Progress has been made, but the goal is far from being achieved, and the Council is not convinced that progress will continue at the same pace if the Federal focus on sex equity is dropped or severely curtailed. Already we hear of local sex equity activities being

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* Title IX: The Half Full, Half Empty Glass, National Advisory Council on Women's Educational Programs, Washington, D.C., Fall 1981.

reduced in anticipation of a weakening of Title IX, and we found no evidence that vocational education would be an exception to this trend.

2. On the other hand, however, the law clearly can and must be simplified. The sex equity provisions should be consolidated and streamlined to focus effort on the most effective mechanisms at each level of government. We need considerably more emphasis at all levels of government on overcoming inequities in addition to discovering them.

WHAT SHOULD BE PROVIDED

3. Many State Advisory Councils on Vocational Education or participants at public hearings on state plans recommended that states should be funding comprehensive programs to deal with sex equity issues. These programs should establish a liaison with potential employers, provide participants with support services and orientation to the program, obtain full support from and integration with the host agency, institute comprehensive evaluation, and employ competent and dedicated staff.

The Vocational Education Act should provide for special programs and supportive services to persons who suffer economic hardship due to sex bias and discrimination in education and employment, and to persons considering and actually enrolled in courses non-traditional for their sex. Minority women, single heads of households, disabled women, teenage parents, and older women have especially serious needs for such services. Day care is one activity allowable under the 1976 law which was highlighted at both our regional hearings as being critically necessary but seldom provided. Women's need for better transportation to vocational education programs was also fequently mentioned.

SEX EQUITY COORDINATORS

4. Our study found that most of the current functions of the state sex equity personnel are essential to the task of achieving equity in a state system. But across-the-board funding of $50,000 is not sufficient in every state to accomplish these functions. Testimony at our regional hearings showed that the full-time state sex equity coordinator has been a very effective mechanism for accomplishing equity goals. Many states with successful enrollment results have also made serious efforts to utilize a broad spectrum of state staff to address sex equity issues.

ESSENTIAL INFORMATION

5. In addition to programs and services recommended above for women who suffer "double jeopardy" because of their age, race, ethnicity, or disability, the Council recommends that the Vocational Education Act require both enrollment and staffing data to be cross-tabulated by race/ethnicity, by sex, by age, and disability. Congress will need such essential information in determining whether the equity goals of the law are being met. In addition, a clear distinction should continue to be made between enrollment leading to gainful and to non-gainful occupations. Given the severe economic needs of minority women mentioned earlier, their high enrollment in non-gainful courses, as shown by the Vocational Education Data System, must continue to receive serious scrutiny.

LEVELS OF EDUCATION

6. Since sex bias and stereotyping exist at all levels of the vocational education system, the reauthorized law should assure that sex equity efforts extend across the board. Special emphasis should be placed on vocational exploration programs at the junior high level. Also critical are programs for women entering or

re-entering the labor market and women who, after working in low-paying, traditionally female jobs, are willing to explore non-traditional job training.

7. The Federal law should facilitate the involvement of non-profit agencies and community groups as service providers or advisors where they are the best qualified to assist in recruitment and retention of women and men in a broad array of vocational programs.

STAFF TRAINING

8. The Vocational Education Data System recently documented that female vocational education staff are also concentrated in instructional areas which are traditional for their sex and that supervisory positions are held predominantly by males. Therefore, a major emphasis of the new law should be on training men and women as instructors in non-traditional programs and on preparing women and minorities to be administrators of vocational education. The program should explore innovative training and credentialling for relevant life experiences as possible means to speed the preparation of persons for these positions.

Training of counselors and teachers at junior and senior high schools which "feed" students to vocational schools should be an allowable activity for Federal sex equity program funds. Hands-on training for such counselors in programs which are non-traditional for their sex is an especially promising option which should be seriously encouraged.

PUBLIC PARTICIPATION

9. The Council continues to support vigorous enforcement of Federal laws that protect the civil rights of women and other beneficiaries of the vocational education programs of this country. As one means

to this end, we support continuation of a mechanism for public involvement in and state accountability for deciding how Federal funds will be spent.

The state plan and public hearing process are only moderately successful as vehicles for increasing public involvement in vocational education. In many cases, persons trying to get involved were discouraged by the extreme complexity of the plans. Furthermore, state administrators were rarely responsive to recommendations from the State Advisory Councils on Vocational Education or to the state plan public hearings.

The challenge before Congress is to achieve an optimal blend of relevant information at each level of government to allow both citizens and officals to insure accountability without undue burdens.

As Congress fashions a revised Vocational Education Act for the United States, there is a fortunate opportunity to meet the needs of a large number of citizens who have lacked equal access to vocational training, while at the same time facilitating the reindustrialization so critical to our economy. In developing a skilled labor force for the difficult years ahead, this country must not be deprived of half the human resources available to us. Equity and sound economic planning both require Federal leadership and support for improved vocational education for women and girls throughout the educational system.

Thank you, Mr. Chairman, for this opportunity to present the view of the National Advisory Council on Women's Educational Programs.

Appendix A

EXECUTIVE SUMMARY
of
Increasing Sex Equity: The Impact of the 1976 Vocational Education Amendments on Sex Equity in Vocational Education

The National Advisory Council on Vocational Education and the National Advisory Council on Women's Educational Programs initiated this joint study of the sex equity provisions of the 1976 Vocational Education Amendments to examine whether their implementation had resulted in equitable access to and benefit from the nation's vocational education system by women and men, girls and boys.

The study results will assist the Councils in providing, under their respective legislative mandates, substantive comments and recommendations to the Secretary of Education, the Congress, and the President regarding the upcoming reauthorization of this legislation; they should also prove useful to educators, students, and citizens involved in vocational education.

The various phases of the study focused on such crosscutting issues as funding mechanisms; Federal and state roles; local implementation; special needs of women; state Sex Equity Coordinators; State Plans, Reports, and public hearings; administrators, counselors, and instructors; curricula and texts; and related legislation. The study included a meeting with Sex Equity Coordinators; preliminary interviews and a subsequent forum with interested agencies and organizations to discuss the critical issues; two regional public hearings attended by persons from 21 states; detailed analysis of enrollment data and various state plans and reports from 15 selected states (representing 55% of all vocational enrollments); and a review of recent research relevant to the study. The major findings of the study are summarized below.

Review of Recent Research

- Those schools putting the most effort into various activities to further equity were also those with the highest Non-traditional enrollment of women. Furthermore, the more attention the state paid to what the school was doing, the more the school tended to do.

- There must be considerably more emphasis at all levels on activities designed to overcome inequities in addition to the monitoring and reviewing designed to discover such inequities.

- Successful sex equity programs established a liaison with potential employers, provided participants with support services and orientation to the program, instituted comprehensive evaluation, and employed competent and dedicated staff. More identification and dissemination of such programs is needed.

- There have been significantly greater increases in adult women's enrollment in Non-traditional programs through post-secondary and adult education than in high school women's enrollment in Non-traditional programs.

- As of 1975, the vocational expectations and occupational choices of working class women were conspicuously absent from research literature, despite the fact that most are employed a large part of their lives.

State Plan and Reports

- Most of the selected State Plans contained general statements indicating good intentions without defining specific methods for carrying out these intentions.

- Although the legislation mandates that women knowledgeable in sex equity issues be represented on State Advisory Councils for Vocational Education (SACVEs), and in addition that minority women be represented, information available in state reports made it difficult to discern if these mandates were followed.

- Attempts by most of the states to provide financial incentives for efforts to address sex equity were diverse but relatively minor and often hard to identify within broader projects.

- Comparison of State Plans with Accountability Reports showed that many states did not expend the full $50,000 specifically allocated to the work of the Sex Equity Coordinator and there was no evidence that unexpended balances were carried over to the following years' budgets.

- Although a large number of the states committed funds to displaced homemaker services, there was no evidence that these funds were being used as was legislatively mandated.

- Most states reported that they were monitoring and reviewing for sex equity, but there was little information regarding what happened once plans, proposals, and activities were reviewed.

- Several states reported that they encouraged the entire state staff to become aware of and assume responsibility for sex equity activities, but the specific activities which resulted were not reported.

- Within all of the selected states, the major effort of Sex Equity Coordinators, in addition to monitoring and reviewing, was conducting workshops and seminars and disseminating related information.

- In most cases the State Plan responded to the requirements of the Federal regulations, however, in only a few cases did the state attempt to go further and define its problems or offer a system or method for eliminating sex bias at the local level.

- Many SACVEs or participants at public hearings on State Plans recommended that the state should be funding programs to deal with sex equity issues. Nevertheless, only a few states allocated additional funds for programs, and many states that allocated funds did not expend them.

- States rarely appeared to have been influenced by other recommendations from SACVEs or from the State Plan public hearings.

- The impact of the Bureau of Occupational and Adult Education's Management Evaluation Reviews for Compliance and Quality and staff reports on the State Plans was difficult to assess.

Enrollment Data (1972-1978)

- National enrollments in all occupational training areas increased by 44%, with an influx of over three million additional students. The enrollment increase was greater for women than for men. Women increased by 1.8 million (60% more than their enrollment in 1972), while men increased by 1.4 million (32% more than their enrollment in 1972.)

- While the actual number of women enrolled nationally in Traditional vocational programs increased by 723,700, the percent (i.e., concentration) of all women vocational students who were in Traditional programs decreased by 9 points, from 65% to 56%.

- Women made greater enrollment gains in Mixed programs than in Non-traditional programs. The number of women in Mixed programs increased by 756,500 (up 5%) while the number in Non-traditional programs increased by 312,300 (up 4%).

- Increases in women's enrollment in Non-traditional programs were greater in Technical and in Agricultural programs than in Trade and Industrial programs.

- Percent increases in women's enrollment in Non-traditional Trade and Industrial programs occurred in courses without a strong sex role image, such as drafting, law enforcement, and graphic arts, rather than in courses with a strong male role image such as construction, police science, and machine shop.

- In the 15 states studied, there were greater increases in the percent of women enrolled in Non-traditional programs between 1972 and 1976 than between 1976 and 1978, even considering that the first time period is twice as long as the second.

- The amount and type of detail provided in the Plans of the 15 states regarding implementation of the sex equity provisions varied and sometimes correlated with improved enrollment patterns for women. Greatest increases in enrollment of women in Non-traditional programs occurred in states where planning and monitoring systems were established to meet equity goals, where funds were committed to establish equity programs, and where efforts were made to utilize the entire state staff to address sex equity issues.

Public Hearings

- Negative attitudes about non-traditional training choices and expansion of male/female roles are still prevalent in state agencies, school districts, and communities, and constitute a major barrier to equity.

- More focus is needed on pre-service and in-service training of vocational education staff, especially to get more women into administrative positions, and men and women into non-traditional teaching positions.

- There is a crucial need for adequate, affordable childcare services.

- Transportation and other supportive services are often critical, especially to poor or rural women's participation in a vocational program.

- Witnesses felt that the law is too vague or lenient in the areas of childcare, displaced homemakers, curriculum revision, training and personnel development, guidance and counseling, and assistance to women in preparing for and obtaining non-traditional employment.

- The role of the Sex Equity Coordinator is viewed as essential to the task of achieving equity.
- The across-the-board funding of $50,000 is not sufficient in every state for full-time sex equity personnel and many Coordinators have been unable to secure additional funds to implement programs.
- Sex equity must be viewed as a human issue that affects men as well as women.
- Minority women need supportive services, programs which address their cultural differences, and outreach efforts to change the negative image of vocational education in their communities.
- Attempts by persons outside of the vocational education system to monitor and review State Plans and testify at the mandated public hearings had shown mixed results, and often proved extremely frustrating.
- More sex-fair textbooks and materials infused into the curricula are needed to expand students' views of their potential career options and expose them to women and men in non-traditional jobs.
- Exploratory vocational programs at the junior high school level help students make better career decisions in high school, when peer pressure to conform to traditional sex roles is strongest.
- More emphasis on sex equity in postsecondary vocational education is needed to meet the needs of those adult women who make career decisions later in life than men.
- The problem of sexual harassment is increasing as more women enter non-traditional classes.
- Broad legislative coordination with other youth, education, and employment programs is needed in order to achieve sex equity in vocational education.

Appendix B

Women enrolled in Non-traditional, Mixed and Traditional categories* by occupational training area and year, United States

	1972	1976 (percent)	1978
Non-traditional: Total	5.4	8.8	11.1
Trades and Industry	5.4	7.8	9.5
Agriculture	3.9	9.6	13.1
Distributive Education	14.6	23.4	16.1
Health	0.0	0.0	0.0
Home Economics (Gainful)	0.0	0.0	0.0
Business	0.0	0.0	0.0
Technical	8.6	12.2	16.7
Mixed: Total Gainful & Non-gainful	52.8	53.1	56.8
Gainful Only	50.5	51.8	55.7
Trades and Industry	40.6	38.0	46.7
Agriculture	26.9	40.5	45.0
Distributive Education	46.3	48.7	52.2
Health	63.2	56.1	57.7
Home Economics (Gainful)	0.0	0.0	0.0
Business	56.8	57.1	60.5
Technical	31.8	46.6	46.2
Home Economics (Non-gainful)	73.8	72.8	69.8
Traditional: Total Gainful & Non-gainful	90.4	84.7	83.4
Gainful Only	86.7	85.8	85.7
Trades and Industry	87.1	85.1	86.2
Agriculture	0.0	0.0	0.0
Distributive Education	0.0	0.0	0.0
Health	90.9	89.2	89.3
Home Economics (Gainful)	86.1	84.7	82.5
Business	86.0	85.4	85.6
Technical	0.0	0.0	0.0
Home Economics (Non-gainful)	93.3	83.7	81.3

SOURCE: Based on data from U.S. Department of Health, Education, and Welfare, Bureau of Occupational and Adult Education.

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* Percentage of women enrolled in vocational education courses nationally, 1972. Non-traditional (NT) = 0.0 to 25%, Mixed (M) = 25.1% to 75.0%, Traditional (T) = 75.1% to 100%.

Appendix C

Vocational Programs Designated as Non-traditional for Women *

Agricultural

Agricultural Supplies/Services
Agricultural Mechanics
Agricultural Products
Agricultural Production
Agricultural Resources
Forestry
Agriculture, Other

Distributive

Automotive Sales
Building, Hardware
Petroleum

Health

None

Home Economics, Gainful & Non-Gainful

None

Business and Office

None

Technical

Chemical Technology
Aeronautical Technology
Architectural Technology
Automotive Technology
Civil Technology
Electrical Technology
Electronic Technology
Electromechanical Technology
Environmental Control
Industrial Technology
Instrumentation Technology
Mechanical Technology
Metallurgical Technology
Commercial Pilot Training
Fire and Fire Safety Technology
Forestry Technology
Oceanographic Technology
Air Polution
Miscellaneous Technology, Other

Technical (continued)

Police Science
Water and Waste Water Technology

Trade and Industrial (T&I)

Plastics Occupations
Air Conditioning
Aviation
Appliance Repair
Body and Fender Repair
Auto Mechanics & Other Auto Trng.
Blueprint Reading
Business Machine Maintenance
Commercial Fishery Occupations
Carpentry
Custodial Services
Diesel Mechanics
Drafting Occupations
Electronic Occupations
Graphic Arts Occupations
Law Enforcement Training
Metalworking Occupations
Machine Shop
Machine Tool Operations
Welding and Cutting
Tool and Die Making
Metallurgy Occupations
Small Engine Repair
Woodworking Occupations
Masonry
Plumbing and Pipefitting
Leather Working
Firefighter Training
Instrument Maintenance Repair
Maritime Occupations
Refrigeration
Management Development
Sheet Metal
Other Metalworking
Barbering
Stationary Energy
Atomic Energy
Electricity
Other Construction
Electrical Occupations
Trade and Industrial Occupations, Other

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* Non-traditional (NT) program = program in which women students enrolled nationally in 1972 comprised 0.0 to 25.0% of all enrolled students. Because of enrollment shifts, several programs would have moved from Non-traditional to Mixed, or from Traditional to Mixed since 1972. The categories have been kept constant, however, so that such changes are not obscured.

Vocational Programs Designated as Traditional for Women *

Agricultural

None

Distributive

None

Health

- Dental Assistant
- Dental Hygienist (Associate Degree)
- Nursing (Associate Degree)
- Other Nursing
- Practical (Voc.) Nursing
- Nursing Assistant (Aide)
- Occupational Therapy
- Medical Assistant
- Medical Lab. Assistant
- Rehabilitation, Other
- Radiologic, Other
- Health Aide
- Medical Lab. Techn., Other
- Surgical Technology

Home Economics, Non-Gainful

- Comprehensive Homemaking
- Child Development
- Clothing and Textiles
- Consumer Education
- Food and Nutrition

Home Economics, Non-Gainful (continued)

- Housing and Home Furnishing
- Home Management
- Other Non-gainful Consumer and Homemaking

Home Economics, Gainful

- Institutional & Home Management
- Clothing Mgt., Prod., & Services
- Home Furnishing, Eqpt., & Services
- Care and Guidance of Children
- Food Mgt., Production, & Services
- Other Occupational Preparation

Business and Office

- Filing and Office Machine Operations
- Stenographic, Secretarial, and Related Occupations
- Typing and Related Occupations

Technical

None

Trade and Industrial (T&I)

- Cosmetology
- Textile Production and Fabrication
- Other Personal Services

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* Traditional (T) program = program in which women students enrolled nationally in 1972 comprised 75.1 to 100% of all enrolled students. Because of enrollment shifts, several programs would have moved from Non-traditional to Mixed, or from Traditional to Mixed since 1972. The categories have been kept constant, however, so that such changes are not obscured.

Vocational Programs Designated as Mixed *

Agricultural

- Ornamental Horticulture

Distributive

- Industrial Marketing
- Transportation
- International Trade
- Advertising Services
- Finance and Credit
- Food Services
- General Merchandise Sales
- Real Estate Sales
- Recreation and Tourism
- Wholesale Trade, Other
- Retail Trade, Other
- Food Distribution
- Hotel and Lodging
- Insurance
- Personal Services
- Distributive Education, Other
- Apparel and Accessories
- Home Furnishings
- Floristry

Health

- Physical Therapy
- Radiologic Technology
- Mental Health Technology
- Inhalation Therapy Technology
- Dental Laboratory Technology
- Opthalmic
- Environmental Health
- Nuclear Medical Technology
- Dental, Other
- Miscellaneous Health Occupations, Other

Health (continued)

- Mortuary Science
- Medical Emergency Technician

Home Economics, Non-Gainful

- Family Relations

Home Economics, Gainful

- None

Business and Office

- Accounting and Computing Occupations
- Personnel Training and Related Occupations
- Information Communications
- Materials Support
- Office Occupations, Other
- Programmers
- Computer and Console Operators
- Other Business Data Processing
- Supervisory and Administrative Management

Techical

- Scientific Data Processing

Trade and Industrial (T&I)

- Other Public Services
- Commercial Art Occupations
- Quantity Food Occupations
- Upholstering
- Commerical Photography Occupations
- Fabric Maintenance Services

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* Mixed (M) program = program in which women students enrolled nationally in 1972 comprised 25.1 to 75.0% of all enrolled students. Because of enrollment shifts, several programs would have moved from Non-traditional to Mixed, or from Traditional to Mixed since 1972. The categories have been kept constant, however, so that such changes are not obscured.

PREPARED STATEMENT OF CHRISTINE LONG FOR THE NATIONAL ADVISORY COUNCIL ON VOCATIONAL EDUCATION

Mr. CHAIRMAN. I am Christine Long, of Chicago, President of C/J Communications Services, and a Member of the National Advisory Council on Vocational Education. As the designated liaison person between my Council and the National Advisory Council on Women's Educational Programs, I am very pleased to have the opportunity to join in presenting to this Subcommittee the findings of our report on the impact of the 1976 Amendments on Sex Equity in Vocational Education. I would like to discuss what I consider to be some of the more significant aspects of the report.

While we found great diversity among the various States with respect to efforts and results, there were modest gains overall. There was a tremendous increase in voc ed enrollment generally between 1972 and 1978 in all occupational areas. Three million additional students enrolled, an increase of 44 percent. The increase was greater for women than for men. Women increased by 1.8 million, or 60 percent of their 1972 enrollment. Men increased by 1.4 million, 32 percent of their 1972 enrollment.

There was considerable variation in the extent to which the increased numbers of students were distributed among the categories of Traditional, Mixed, and Non-traditional programs. In 1972, 60 percent of the women enrolled in gainful occupational training were in Business and Office programs. This had dropped to 53 percent by 1978. the concentration of women in these programs, which traditionally had enrolled the largest percentage of women preparing for gainful employment, had decreased. Women are moving increasingly to Mixed and Non-traditional programs, and the percentages are significant because of the large increase in actual numbers of women in vocational education during this period.

The increase of women in so-called Mixed programs between 1972 and 1978 was 756,500, a rise of 5 points from 29 percent to 34 percent, which widened their numbers over men in these programs. The increase of men (443,200) was a rise of only 3 points, from 20 percent to 23 percent.

In programs Non-traditional for women, the percentage of women rose from 6 percent in 1972 to 10 percent in 1978. Within the non-traditional areas, women's increased enrollment was greater in Technical and Agriculture programs than in Trade and Industrial. (Technical: 8.6 percent to 16.7 percent; Agriculture: 3.9 percent to 13.1 percent; Trades and Industry: 5.4 percent to 9.5 percent). In Trade and Industrial programs that are Non-traditional for women, their enrollment percent increases were in courses without a strong sex role image, such as drafting, law enforcement, and graphic arts, rather than in courses with a strong male role image such as construction, auto mechanics, and machine shop. The national enrollment data used in this study combined secondary and postsecondary vocational education. Previous studies have found that there have been significantly greater increases in women's enrollment in non-traditional programs through postsecondary and adult education than in high school.

Another aspect of the data is the change in enrollment patterns for men. The enrollment of men in programs traditional for women, such a health care and clerical, increased by only one percent between 1972 and 1978. there was a greater enrollment increase for men in the mixed programs, but by far the largest male enrollments continued to be in programs traditional for men.

The National Commission for Employment Policy, in its report, "Increasing the Earnings of Disadvantaged Women" (January, 1981), concludes on the basis of its studies: The prospects for progress toward sex equity in vocational education are mixed. There appears to be slow but discernible progress in moving women into training in agricultural and technical fields, but very little change in the proportion of women in the two largest programs for paid employment, business and office, and trades and industry. Evaluations of the implementation Act indicate only slow progress toward compliance. This is unfortunate since there is evidence of progress toward non-traditional enrollments in schools where the legislation had been enforced. At the same time, more examples of successful programs are needed.

I would recommend that the Subcommittee review this report and its recommendations. The National Advisory Council on Vocational Education is a statutory member of the National Commission for Employment Policy.

Mr. Chairman, while the statistics of these reports are interesting, we must look behind the figures to see the real significance of efforts to eliminate sex stereotyping and sex bias. When we talk about occupations traditional for women, we are talking about jobs at the low end of the pay scale. By far the largest perecentage of female enrollment is still in traditional programs which train for low-paying jobs, i.e., Health 89.3 percent, Business 85.6 percent, Home Economics (Gainful) 82.5 percent.

Why do people elect to enroll in training programs which are sex stereotyped and lead to low-paying jobs? Why do they choose programs which are out-moded and lead to dead-end jobs, or no jobs at all? There is no simple answer to those questions. Societal and peer pressures are partly responsible, it is true. But a major reason is the lack of responsiveness of those school systems which do not provide up-to-date information and guidance, do not keep programs current and relate them to the job market, and which are content with the status quo.

We must combat this kind of inertia and continue a concerted effort to eliminate sex bias and stereotyping in training programs and employment to allow women to compete on an equal basis in the job market. Success will not be measured by a statistical numbers game, but by real increases in the earning power of working women, and ultimately the impact that will have on our economy.

The modest progress described by our report pales in contrast to the real needs. The days are gone when a woman's earnings were important only for family luxuries. Today, over half the workforce is made up of women, and most work one and sometimes two jobs out of necessity, either as the sole supporter of themselves and their family, or to supplement the family income just to make ends meet.

There is a particular need to expand sex bias-free training opportunities for Black women. In 1978, the median income of households headed by Black females was $5,082. Such households contain 41.9 percent of all Black children. This compares with 12.5 percent of white children who live with their mothers only. Minorities, including minority women, will make up an increasingly larger percentage of the workforce in the future. The minority population, including Hispanics, in the 16–24 year age group will increase to 22.1 percent in 1995. Minorities are expected to make up 30 percent of the labor force by the late 1980's. These figures indicate that there will be a greater demand in the 80's and 90's for high quality, up-to-date vocational training for all segments of the population.

With the large increase of women in the workforce, we can no longer assume that working class women have low motivation and lack career interest, if indeed that ever was true. Where there appears to be low motivation, I suspect it is born of lack of opportunity and a sense of resignation in the face of perpetuated stereotypes. With the increase of working mothers, an entirely new set of role models is emerging for the younger generation. We must be careful that we do not build into those models the perception that women are qualified only for training in the lowest paying occupations.

There have been great changes in the attitudes and aspirations of young women to work. Only 25 percent of the females surveyed in the 1979 National Longitudinal Study reported that they wanted to be exclusively homemakers at the age of 35. This is a decrease of 35 percent since the 1968 NLS.

A November, 1980 study by the Joint Economic Committee observes:

Much of the employment growth in the past decade had been in the service sector, where jobs are traditionally filled by women and younger workers. The continuing shift of the economy toward services will provide employment for many women, but women in the 1980's are still likely to experience higher than average rates of unemployment and underemployment. The bunching of the middle layers of workers is likely to lessen the promotion opportunities for women and minorities as well as prime-age workers, as competition intensifies.

These developments could influence women to move to previously male-dominated areas of employment and away from the traditional female jobs; even though, as yet, societal sex roles—particularly in the job market—have not been overturned. This is supported in studies of wages for men and women. Contrary to popular perceptions, women's earnings are now less in relation to men's than they were 20 years ago. This is partly a result of occupational differences. In 1978, women employed full time and year-round made 59.4 percent of what men earned compared to 60.5 percent in 1969 and 61.3 percent in 1959. More than two-thirds of employed women now hold traditional female jobs such as teaching and nursing.

The report points out that, as more women enter the labor force, the wages in female-oriented occupations will probably be driven down further.

In light of these changes, we cannot tolerate business as usual. When the vocational education system, at any level, permits outmoded stereotypes to limit training opportunities, it is failing in its responsibilities to the students and to the Nation.

The needs of women for access to better paying jobs is justification in itself for the efforts we make to eliminate occupational stereotyping. But we must also consider the needs of our economy for skilled workers now and in the future. Three out of four jobs in the 1980's will require technical training below the baccalaureate level. Yet more students than ever are dropping out of science and mathematics after the tenth grade, eliminating themselves from technical careers, according to a recent report by the National Science Foundation. There is a growing mismatch between the needs of the workplace and the skills of U.S. workers.

The Nation's workforce is aging. The average age of tool and die workers is 47. Forty percent of the engineers are 40 or more years of age. The group of people 65 and over is growing about twice as fast as the population as a whole. By 1990 there will be about three million more people at the high end of the population—75 and older—than there are today. These workers must be replaced. In addition, workers must be trained for a whole new generation of high-technology jobs which never existed before.

The skilled labor shortage also has an effect on the readiness of the military. Lester C. Thurow, professor of economics and management at the Massachusetts Institute of Technology, says that "Employers are raiding the military for skilled technicians." The Armed Forces find that they cannot maintain their equipment because they have lost their skilled blue-collar workers.

It is sometimes suggested that existing unemployed persons could be moved into these jobs. But as the House Armed Services Committee observes, training takes time. As in World War II, the Committee says, "the solution to this national problem will require a national commitment." Unlike World War II, however, today's manpower shortages will not respond to a quick-fix solution. The Committee observed: Today . . . you can't just take someone off a farm or out of a kitchen and expect him or her to build aircraft engines. The technology is too advanced, the tolerances too tight, the equipment too sophisticated. It takes three years for a machinist apprentice to complete his rigorous course. It takes the better part of a year to retrain someone from producing autos, for example, to work in high-technology aerospace parts.

Developing skills of the American people remains one of the greatest challenges facing our Nation. A $1.4 trillion investment in sophisticated machinery and weapons will not solve the defense needs of our Nation, nor will the productivity of our economy over-all increase, if we do not have trained people to build, run, and repair the equipment.

As we develop policies to meet these growing needs, there can be no room for programs which limit, rather than expand, opportunities. If vocational education is to make good on its claim that it contributes to the Nation's productivity, then it must be aggressive in its determination to eliminate policies and practices which would restrict the opportunities and productivity of any of its students. While we continue efforts to eliminate existing occupational sex stereotyping, we must all insure that there be parity between males and females in new emerging occupational fields. We must not let new jobs become categorized as "male" or "female."

Obviously, vocational education alone is not going to end sex stereotyping in our society, but it had the responsibility to take the lead in education and the broader community to change attitudes which restrict individual choice, and which, in the long run, could hinder the development of an adequately trained workforce. When the needs become acute, American business and industry will hire the persons trained to do the job with little regard for gender, color, or other non-relevant factors. Vocational educational must act affirmatively now to provide the training for such a workforce.

Our sex equity study indicated that most activity under the 1976 Amendments had been to identify and monitor sex equity issues and problems. Such activity, along with other equity legislation such as Title IX, has helped to increase awareness. In those States where there is sensitivity and commitment to equity issues, this has stimulated other activity and produced the best results. In other States, it was found that little is done beyond what is required for minimal compliance with the provisions of the Act. In most States, little if any discretionary program improvement or research funds appear to have been used for sex equity purposes.

Since passage of the 1976 Amendments, the majority of State Advisory Councils identified sex equity as an area where greater efforts are needed. The Overview of the 1979 Reports of the State Advisory Councils, prepared by the National Advisory Council, finds that sex equity concerns were included in two of the top ten most prevalent issues—that is, program access by special needs populations, and guidance and counseling. This Overview report was sent to all Members of Congress and the Subcommittee staff earlier this year.

The National Advisory Council on Vocational Education had concluded that the elimination of sex bias and stereotyping is in the National interest, and a concerted effort must be made to break down the artificial barriers which delineate the sex role designation of many occupational classifications.

In its Policy Statement on Reauthorization of the Vocational Education Act (October, 1981), the council recommended that the scope of the Act be narrowed, and Federal funds be focused on two major areas—program improvement and access/equity (including sex equity). The Council believes that Federal funds should supplement and enhance the basic on-going programs, which should be supported primarily with State and local funds.

Under this approach, Federal funds would not be used to maintain basic, on-going programs. This would make a greater portion of the Federal funds available to States to mount the innovative programs and services needed to achieve sex equity, and access and equity in other areas. The Council would urge that States be allowed greater flexibility in the approaches they take to deal with issues such as sex equity, but at the same time would demand greater accountability for results.

It is time to move beyond identifying and monitoring the problem, to mounting exemplary and innovative efforts designed to bring about significant change.

Such efforts should include making available better career information to guidance counselors and classroom teachers. There should be in-service training for administrators and teachers. It must be a coordinated effort between voc ed and other segments of the educational community at the elementary and secondary levels as well as the postsecondary and adult levels. There should be joint projects with business, labor, and other community interests to assist in school-to-work transition problems and job placement. There should be support services, such as child care and counseling, especially for displaced adult women returning to school and the workplace. There should be an oversight role for State Advisory councils in evaluating the responsiveness of State and local efforts, and the effects of the programs which they may undertake to deal with sex equity problems. There must be strong leadership and technical assistance available to the States from the U.S. Department of Education to bring about change.

Change will not occur without commitment, leadership, and funding from the Federal Government. State and local resources are limited, and administrators are preoccupied with keeping schools open and programs operating.

The impetus must be provided through the Vocational Education Act. We must continue a strong focus on sex equity, and provide the resources needed to expand efforts in this area. Such efforts will provide expanded opportunities for women in the job market, and address a national need for an expanded, skilled workforce. Elimination of sex stereotyping is not a "luxury item." It should be viewed as part of an ongoing strategy to prevent shortages of vital skilled workers in the future.

On behalf of the National Advisory Council on Vocational Education, I want to thank you for the opportunity to present this testimony. I hope the subcommittee will find the Sex Equity Report to be useful as you continue deliberations on this issue.

Ms. Foxx. The National Advisory Council on Women's Educational Programs was established to advise Congress and Federal officials regarding the educational needs of women. As a top priority, we have supported programs and policies to increase educational options for women and girls based on their interests and aptitudes rather than on expected sex-related roles.

Since 1975, the litany of reasons why women needed far more varied and better paying vocations has begun to seep into the consciousness of this Nation. But, the facts remain quite shocking. Nearly two-thirds of all women in the labor force in 1979 were single, widowed, divorced or separated, or had husbands who earned less than $10,000.

The average woman worker still earns only 59 cents for every dollar that a man earns, even when both work full time, year around. This is a drop in what women earned in 1959.

In 1979, half of all poor families were headed by women, compared to only about one-third of such families in 1969. Black teenage girls have the highest unemployment rate of all workers, male and female.

The pertinent question is, have these sex equity provisions been effective in improving the educational lot of women? The answer is, yes, they have made a good start. Our study showed that these serious needs are being addressed, however, the pace is slow and uneven. Much remains to be done in righting the balance of vocational education provided to women and men.

Both councils strongly recommend that continued national, State and local efforts are essential to eliminate sex discrimination, bias and stereotyping, and to ensure the progress necessary for women and the country as a whole.

The most important evidence we found that the sex equity provisions are achieving their intended purpose is that nationally, the enrollment of women is increasing in vocational programs other than those which traditionally have been taken by women.

Nationwide, women are increasingly taking advantage of the opportunities offered by vocational education, and they are beginning to train for a broader range of jobs than they have in the past, jobs that offer substantial challenges and salary potentials.

Our study found encouraging progress at the State and local levels as well. We found that in several States where State plans required goals and timetables, plans from the local education agencies for increasing sex equity, and specific assurances that such plans would be achieved, there was a concomitant increase in the number of women enrolled in nontraditional programs.

The greatest gains were in States where detailed plans for eradication of identified sex equity problems, plans which extended beyond a mere rehashing of the verbiage of the law and regulations. In short, it appears that the achievement of sex equity requires not only the commitment of funds but also the establishment of a system that requires, as well as encourages, such planning activity.

Our study showed that many of the sex equity activities allowed but not mandated by the 1976 act were not funded by the States. Even more disturbing, many of the mandated activities were not funded or not fully implemented.

Based on our research and regional public hearings, the council recommends, first and foremost, that sex equity must continue as a major purpose in the reauthorized Vocational Education Act. Progress has been made, but the goal is far from being achieved, and the council is not convinced that progress will continue at the same pace if the Federal focus on sex equity is dropped or severely curtailed.

Already we hear of local sex equity activities being reduced in anticipation of a weakening of title IX, and we found no evidence that vocational education would be an exception to this trend. In talking with vocational education coordinators in North Carolina, they have assured me that if there are not the Federal mandate, that sex equity will be left out of the future activities.

On the other hand, the law clearly can and must be simplified. We need considerably more emphasis at all levels of government on overcoming inequities in addition to discovering them.

I think all of us—not all of us—but many of us are well aware that they are there. The Vocational Education Act should provide for special programs and supportive services to persons who suffer economic hardship due to sex bias and discrimination in education and employment, and to persons considering and actually enrolled in courses nontraditional for their sex. Minority women, single heads of households, disabled women, teenage parents and older women have especially serious needs for such services.

Daycare is one activity allowable under the 1976 law which was highlighted at both our regional hearings as being critically necessary seldom provided. Our study found that most of the current functions of the State sex equity personnel are essential to the task of achieving equity in a State system.

But across the board funding of $50,000 is not sufficient in every State to accomplish these functions. Testimony at our regional hearings showed that the full time State sex equity coordinator has been a very effective mechanism for accomplishing equity goals.

In addition to programs and services recommended above for women who suffer double jeopardy because of their age, race, ethnicity or disability, the council recommends that the Vocational Education Act require both enrollment and staffing data to be cross tabulated by race and ethnicity, by sex, by age and by disability.

Congress will need such essential information in determining whether the equity goals of the law are being met. In addition a clear distinction should continue to be made between enrollment leading to gainful and to non-gainful occupations.

Since sex bias and stereotyping exist at all levels of the vocational education system, the reauthorized law should assure that sex equity efforts extend across the board. Special emphasis should be placed on vocational exploration programs at the junior high level. Also critical are programs for women entering or reentering the labor market and women who, after working in low paying, traditionally female jobs, are willing to explore nontraditional job training.

The vocational education data system recently documented the female vocational education staff are also concentrated in instructional areas which are traditional for their sex and that supervisory positions are held predominantly by males.

Therefore, a major emphasis of the new law should be on training men and women as instructors in nontraditional programs and on preparing women and minorities to be administrators of vocational education.

Training of counsellors and teachers at junior and senior high schools which feed students to vocational schools should be an allowable activity for Federal sex equity program funds.

The council continues to support vigorous enforcement of Federal laws that protect the civil rights of women and other beneficiaries of the vocational education programs of this country. As one means to this end, we support continuation of a mechanism for public involvement in and State accountability for deciding how Federal funds will be spent.

The State plan and public hearing processes are only moderately successful as vehicles for increasing public involvement in vocational education. In many cases, persons trying to get involved were discouraged by the extreme complexity of the plans.

As Congress fashions a revised vocational education act for the United States, there is a fortunate opportunity to meet the needs of a large number of citizens who have lacked equal access to vocational training, while at the same time facilitating the reindustrialization so critical to our economy.

In developing a skilled labor force for the difficult years ahead, this country must not be deprived of half the human resources available to us. Equity and sound economic planning both require Federal leadership and support for improved vocational education for women and girls throughout the educational system.

Thank you, Mr. Chairman, for this opportunity to present the view of the National Advisory Council on Women's Educational Programs.

Mr. **Miller**. Thank you. Next, the committee will hear from Ms. Long. You may go ahead.

STATEMENT OF CHRISTINE LONG, MEMBER, NATIONAL ADVISORY COUNCIL ON VOCATIONAL EDUCATION

Ms. **Long**. I'd like to add some testimony on behalf of the National Advisory Commission for Vocational Education, since we were involved in a joint study with the National Advisory Council for Women's Educational Programs.

I will not attempt to repeat many of the statements made by Ms. Foxx in the interest of the time commitment. However, I would like to offer some comments of emphasis that derived from the work of the National Advisory Commission for Vocational Education.

We support those statements about their data for employment history for women in the—we support those statements made by the National Advisory Commission for Women's Educational Programs, the need for sex equities. However, our thrust is somewhat different. For example, our concerns include questions about the statistics which, while they are interesting, requires looking beyond figures and seeing, perhaps, the real significance of efforts to eliminate sex stereotyping and sex bias.

When we talk about occupations traditional to women, we are talking about jobs at the low end of the pay scale. While the earlier testimony spoke of some changes in participation among women and the full spectrum of jobs, nevertheless, women still remain isolated in some occupational sectors. Those sectors, indeed, are at the low end of the scale. We have asked such questions as why do people elect to enroll in training programs which are sex stereotyped and which lead to low paying jobs? Why do they choose programs which are outmoded and lead to dead end jobs or no jobs at all?

There is no simple answer to those questions and societal and peer pressures are partially responsible. But a major reason is the lack of responsiveness in school systems which do not provide up-to-date information and guidelines, which do not keep programs current and relate them to the job market, and which are content with the status quo.

We believe that we must combat this inertia and continue a concerted effort to eliminate sex bias and stereotyping in training programs and employment, to allow women to compete on an equal basis in the job market. The modest progress which was described in our report pales in comparison to the real needs. The days are gone when women's earnings were important only for luxuries. It is particularly important to expand sex business training opportunities for black women.

There has been a large increase of women in the working force. We cannot longer assume that working class women have low motivation and lack career interest, if indeed that ever was true. Where there appears to be low motivation, I suspect it is born of lack of opportunity and a sense of resignation in the face of perpetuated stereotypes. With the increase of working mothers, an entirely new set of role models is emerging for our younger generation. We must be careful that we do not build into those models the perception that women are qualified only for training in the lowest paying occupations.

There has been a great change in the attitudes and aspirations of young women to work. Only 25 percent of the females surveyed in the 1979 National Longitudinal Study reported that they wanted to be exclusively homemakers at the age of 35. This is a decrease of 35 percent since the 1968 NLS. The report further points out that as more women enter the labor force, the wages in female-oriented occupations will probably be driven down further.

In light of these changes, we cannot tolerate business as usual. When the vocational education system, at any level, permits outmoded stereotypes to limit training opportunities, it is failing in its responsibilities to the students and to the Nation.

There is a growing mismatch also, we believe, between the needs of the workplace and the skills of U.S. workers. The Nation's work force is aging. I have some regular contact with a community college in my area, Trident College, they are continually struggling with the need to secure persons. For example, in the field of tool and dye, or dye casting, they find on a repeated basis that there are shortages in those areas. The Nation's work force is aging. Nevertheless, there has not been a concerted effort to recruit another qualified work force—qualified group into that work force, to secure women's enrollment in those training programs.

These workers must be replaced when, for example, the average age of tool and dye workers is 47 years old. Presumably, if we are going to deal with productivity in our Nation, we need to replace those workers. In addition, workers must be trained for a whole new generation of high technology jobs which never existed before. The skilled labor shortage has an effect on the readiness of the military, both in terms of members of the military and also in those industries which provide for defense needs.

Developing skills of the American people remains one of the greatest challenges facing our Nation. There can be no room for programs which limit, rather than expand, opportunities. If vocational education is to make good on its claim that it contributes to the Nation's productivity, then it must be aggressive in its determination to eliminate policies and programs which would restrict the opportunities and productivity of any of its students.

Obviously, vocational education alone is not going to end sex stereotyping in our society, but it has the responsibility to take the lead in education and the broader commitment to change attitudes which restrict individual choices, and which, in the long run, could hinder the development of an adequately trained work force.

When the needs become acute, American business and industry will hire the persons trained to do the job with little regard for gender, color, or other nonrelevant factors. Vocational education must act affirmatively now to provide the training for such a work force.

Our sex equity study indicated that most activity under the 1976 amendments has been to identify and monitor sex equity issues and problems. Such activity, along with other equity legislation such as title IX, has helped to increase awareness. In those States where there is sensitivity and commitment to equity issues, this has stimulated other activity and produced the best results. In other States, it was found that little is done beyond what is required for minimal compliance with the provisions of the act. Since passage of the 1976 amendments, the majority of States' advisory councils identified sex equity as an area where greater efforts are needed.

The National Advisory Council on Vocational Education has concluded that the elimination of sex bias and stereotyping is in the national interest, and a concerted effort must be made to break down the artificial barriers which delineate the sex role designation of many occupational classifications.

In its policy statement on reauthorization of the Vocational Education Act in October 1981, the Council recommended that the scope of the act be narrowed, and Federal funds be focused on two major areas—program improvement and access and equity, including sex equity. The Council believes that Federal funds should supplement and enhance the basic ongoing programs, which should be supported primarily with State and local funds.

Under this approach, Federal funds would not be used to maintain basic, ongoing programs. This would make a greater portion of the Federal funds available to States to mount the innovative programs and services needed to achieve sex equity, and access and equity in other areas. The Council would urge that States be allowed greater flexibility in the approaches that they take to deal with issues such as sex equity, but at the same time, would demand greater accountability for results.

It is time to move beyond identifying and monitoring the problem, to mounting exemplary and innovative efforts designed to bring about significant change. Such efforts would include making available better career information to guidance counselors and classroom teachers. There should be in-service training for administrators and teachers. It must be a coordinated effort between vocation education and other segments of the educational community at the elementary and secondary levels, as well as the postsecondary and adult levels. There should be joint projects with business, labor, and other community interests to assist in school-to-work transition problems and job placement.

There should be support services such as child care and counseling, especially for displaced adult women returning to school and the workplace. There should be an oversight role for State advisory counsels in evaluating the responsiveness of State and local efforts, and the effects of the programs which they may undertake to deal with sex equity problems. There must be strong leadership and technical assistance available to the States from the U.S. Department of Education to bring about change.

Change will not occur without commitment, leadership, and funding from the Federal Government. State and local resources are limited, and administrators are preoccupied with keeping schools open and programs operating.

The impetus must be provided through the Vocational Education Act. We must continue a strong focus on sex equity, and provide the resources needed to expand our efforts in this area.

On behalf of the National Advisory Council on Vocational Education, I want to thank you for the opportunity to present this testimony. I hope the subcommittee will find the sex equity report to be useful as you continue deliberations on this issue. Thank you.

Mr. **MILLER**. Thank you.

I don't know if the chairman brought this up, but at some point, we are going to get into a whole series of votes. To the extent to which you can summarize and provide us the opportunity to ask questions, everything will be put in the record in its entirety.

STATEMENT OF RALPH E. SMITH, ECONOMIST AND DEPUTY DIRECTOR, NATIONAL COMMISSION FOR EMPLOYMENT POLICY

Dr. **SMITH**. I am Ralph Smith, the Deputy Director of the National Commission for Employment Policies. I would like to say a few words and then turn the testimony over to Pat Brenner who directed our studies on vocational education.

I would like to begin by commending this subcommittee and the congress for its actions in 1976 in reporting out and enacting the sex equity amendments. It was a useful and important thing to do in 1976. The point that I want to make this morning is that it would be just as useful and as important to continue that effort in 1981 for several reasons.

First, more and more women are continuing to come into the labor force. Last month, over 52 percent of working age women had jobs or were looking for work. Many of them are simply not well prepared to participate in the labor market today.

Once women get into the labor market, they continue to be mainly in the stereotypical female jobs, jobs that have low wages and few opportunities for advancement.

One reason why they are getting low paying jobs is that the education that they are receiving, including vocational education, I am afraid, is often equipping them only for the stereotypically female jobs. Young women need to be prepared for the full range of occupations. It is important, especially for women who are going to head their own families today.

Over half of all poor families in this country are families that are maintained by women, and vocational education could be a means for helping such women to prepare for better jobs.

The testimony that we are presenting this morning is based on a major study that our Commission did in 1980 on efforts to increase the earnings of disadvantaged women through education, employment and training programs. I should point out that since then, we have had a change of membership on the Commission and the views that we are expressing and the recommendations that we are reporting on do not necessarily reflect the views of the present members.

I would like to now have Pat Brenner continue with our testimony.

STATEMENT OF PATRICIA BRENNER, STAFF ASSOCIATE, NATIONAL COMMISSION FOR EMPLOYMENT POLICY, ACCOMPANIED BY RALPH E. SMITH, ECONOMIST AND DEPUTY DIRECTOR

Dr. **Brenner.** I think Ralph has given you a good general picture of why the Commission was concerned with the problems of disadvantaged women and why we addressed how to increase the earnings of disadvantaged women through the strategy of analyzing those institutions that seem to contribute to the crowding of women into a few low paying occupations.

We do find that vocational education affects the occupational qualifications and aspirations of women, and thus the jobs they eventually take. We also found in our study that too often, vocational education promotes occupational stereotyping.

But I think the third important point to make is that we have found that the sex equity provisions of 1976 amendments have been helpful at combating that occupational stereotyping.

As we looked at the probems of disadvantaged women, we did not just address vocational education. We looked at the education system more generally and we also studied the effects of employment and training programs on women. The Commission did make a set of recommendations on improving the earnings of disadvantaged women.

Ten of those address sex equity and vocational education. Ten address the same issues in Federal employment and training programs. Appended to our testimony is a copy of those recommendations with some rationale for each of the recommendations.

We found, of course, that vocational education is not the only institution that affects the aspirations and qualifications of students. Home, family, and community certainly are important and pervasive influences. But we find that the schools are also important.

Within the schools, there were several reasons why we focused especially on vocational education. First, vocational education is a curriculum that is intended to prepare students for work. Most of the students who concentrated their courses in vocational education do not expect to go on to college and they do not in fact go on to college.

Second, the Federal Government makes a substantial contribution to vocational education and therefore, this is an area where we might expect the Federal Government to have some impact. The contribution through the Vocational Education Act is something less than $1 billion, but we estimate that if you add in the money that flows to vocational education, through CETA, the money that flows through voucher programs like the basic educational opportunity grants, the veterans grants, that in 1980, if we count those together, the Federal Government probably contributes about 25 percent of the total public funds that went into vocational education.

A third reason for addressing vocational education particularly is that the Congress has already addressed sex equity in vocational education to a greater extent than any other education program.

As you know, one of the four major goals of the 1976 amendments was to promote sex equity, and the 1976 amendments do contain extensive provisions to enable State programs to overcome sex discrimination and sex bias.

For these reasons, we thought that it was worth while and would be an effective strategy to look at the promotion of sex equity in vocational education.

In looking at vocational education programs, the Commission, as in most of its work, tries to take a national perspective so that we try to look at the national data base and the national studies that are available to get some idea of what is happening around the country as a whole.

Of course it is important to know about individual cases, too, and I know that several of the people who will testify here can tell you more fully about programs in their own particular areas.

In the written testimony, I provided several tables. First, I would like to address the data on overall participation in vocational education by women. Of course what we find is that sex inequity in vocational education does not mean that women are underrepresented overall. In one of the tables that I have in the testimony, I show the percentage distribution of class hours by subject of course of high school seniors in 1972. Again, this is nationwide data. What we see in that table is that while senior men and women took almost the same percentage of their course work in the humanities in 1972, about 42 percent of their course work, the English, history, what we see is that women took significantly more vocational education and less natural sciences, including mathematics.

In fact, almost all of the differential between, if you look at the pattern of courses taken by men and women, almost all differential can be accounted for by the difference that women take about 35 percent of their course work in vocational education and men take about 25 percent of their course work in vocational education, and almost all of that can be accounted for by women taking more of their course work in home economics and men taking more of their course work in natural sciences and mathematics.

I know this subcommittee is especially interested in the effects of the 1976 amendments. I would like to address three sources of information on that topic.

First, program data collected by the Department, formerly the Office of Education, the congressionally mandated study of education conducted by the American Institute for Research, and third, information from a conference on education sex equity and occupational stereotyping conducted by the Commission in May 1980.

Again, I have a table looking at the enrollment in vocational education by program. In this table, I have the percentage female for 1972, 1976 and 1978. What we can see is that while there have been some changes since 1972, in 1978, women continued to predominate and constitute over 75 percent of the enrollment in these programs: health occupations, home economics, and business and office programs.

Men continued to dominate and constitute over 75 percent of the enrollment in agriculture, trade and industry, and the technical areas. Only one area, the relatively small retail sales category, was about 50 percent female.

Turning to data that was generated through the study conducted by the American Institute for Research, they also collected national data from about 3,300 students in schools around the country. One of the important things that they did was to disaggregate enrollments within each of the seven broad areas.

I think this breakdown is important because it allows us to see whether increased female enrollments within a category has occurred because more women enrolled in a predominantly female field or whether they moved into predominantly male fields such as tool and diemaking within trade and industry.

If I could summarize all this, I would say that the data appeared to converge on the following patterns. The apparent downturn in the concentration of women in health between 1972 and 1976 appears to have leveled off by 1978. Second, while the participation of women in traditionally male programs in agriculture and technical occupations, has continued to increase modestly, the participation of women in predominantly male programs in trades and industries, has leveled off.

The movement of women into programs that had been predominantly male has been more than the movement of men into programs that had been predominantly female. Again, I would say that progress has been made, but we will have to continue in our efforts if we are to continue to make progress toward enrolling women in training for occupations that have been predominantly occupied by men.

Another important issue that the AIR study addressed was whether schools could in fact make a difference in encouraging nontraditional enrollments, considering the impact of other institutions.

Mr. **Miller**. We are going to have to vote. We will be right back.

[Voting recess.]

Mr. **Miller**. Go ahead.

Dr. **Brenner**. I'll try to finish briefly.

I was saying that the AIR study found that when schools made an effort to encourage students to enroll in nontraditional programs, they found that more students did so.

We think that Congress acted in a timely, forward looking way in 1975 when it held the oversight hearings that resulted in the sex equity provisions of the 1976 provisions.

We did find, however, that the laws and regulations providing for sex equity in vocational education had not been vigorously enforced by the Office of Vocational and Adult Education nor by the Office of Civil Rights at the Department of Education.

We think that the enforcement activities need to be strengthened if we are to make progress in this area.

Finally, the Commission Study on Disadvantaged Women evaluated the treatment of women in vocational education at the same time it considered their treatment in the education system generally, and training programs funded by the government.

The tendency to train women is endemic in all these institutions. We don't expect these changes to result in massive changes in society or in the occupations women hold.

But because vocational education already affects the aspirations of women, we believe it ought to do a better job in training women in fields that offer higher rates of pay than most predominantly female occupations.

Thank you.

[The prepared statement of Patricia D. Brenner and Ralph Smith follows:]

PREPARED STATEMENT OF DR. PATRICIA D. BRENNER, ECONOMIST AND DR. RALPH E. SMITH, ECONOMIST AND DEPUTY DIRECTOR, NATIONAL COMMISSION FOR EMPLOYMENT POLICY

Mr. Chairman, Members of the subcommittee, Thank you for inviting us to discuss Commission findings and recommendations concerning sex equity in vocational education. Our testimony today reflects the results of the Commission's study on improving the earnings of disadvantaged women and of continuing work the Commission has done on vocational education reauthorization.

The Commission's report, "Increasing the Earnings of Disadvantaged Women," was transmitted to the President and the Congress in January 1981. The Commission's recommendations concerning sex in vocational education and in employment and training programs are appended to this testimony. These recommendations do not necessarily represent the positions of the current Federal members of the Commission nor of the members of the public recently designated by the President to serve on the Commission.

In summary, the Commission recommended that Congress should continue to stress sex equity in the Vocational Education Act as an important part of the legislation and that the Department of Education should stress sex equity both in the supportive services it provides to State and local vocational authorities and in its legislative enforcement efforts. These recommendations arose from several findings. First, vocational education as part of the education and training system affects the occupational qualifications and aspirations of women, and thus the jobs they eventually hold. Second, too often the vocational education system promotes occupational stereotyping that has held down women's earnings by training women in predominantly female fields. Third, while much progress still needs to be made, the sex equity provisions of the 1976 amendments have been helpful at reducing occupational stereotyping in vocational education program. Based on these findings, the Commission strongly supported the sex equity provisions of the 1976 legislation. The rest of my testimony will expand these summary findings and recommendations.

A substantial part of the Commission's resources during 1980 were devoted to examining ways to encourage education and training programs to help improve the economic situation of disadvantaged women. Our concern arose from several observations about the status of women in the United States: (1) a large and growing proportion of the poor are women or are in families supported by women; (2) the earnings of women remain considerably below those of men; (3) occupational segregation by sex is an important factor in accounting for women's lower earnings; and (4) education and training programs, including vocational education, can help to prepare disadvantaged women for better paying occupations.

In 1978, among persons who were in the age groups most likely to be working (ages 18-64), 63 percent of the poor were female. The higher incidence of poverty among woemn primarily reflects the considerable amount of poverty in families without a husband present: one-seventh of all familes in the U.S. are supported by women, yet these families account for one-half of all poor families. The median income of households headed by women in 1978 was only 48 percent of that of families overall. Virtually all of the growth in the number of poor families during the past decade can be accounted for by growth in the number of poor families without husbands.

The considerable amount of poverty among families supported by women is due, in part, to the absence of another potential earner and to the difficulty that many of these women have in working outside the home, especially on a full-time schedule.

Nevertheless, women maintaining families with no husband present are more likely to be in the labor force than women in married couple families. Female heads-of-family share with other women a more basic problem: when they do work outside the home, their earnings are likely to be low relative to the earnings of men with similar levels of education.

The incidence of poverty among minority women and their families is especially high. For example, in 1978, 52 percent of black families and 53 percent of the Hispanic families with a female householder were poor, compared with 24 percent of the white families. Exacerbating the problem is the much higher percentage of minority families without husbands present: 40 percent of black families, 20 percent of Hispanic families, and 12 percent of white families were supported by women.

In our study of the ways that the Federal Government might improve the economic circumstances of poor women, we concentrated on strategies to increase their earnings. Although many women who head households are out of the labor force and dependent on welfare, an increasing percentage of those with children are in the labor force (66 percent in 1979 compared with 59 percent in 1970) and rely on labor market earnings for their family income. We believe that preparation for jobs with higher earnings can be used to prevent poverty, as well as helping people to move out of poverty. This approach is of particular importance to women who are or may become the main support of their families and to minority women, since these women and their families are much more likely than others to be poor.

Why do women earn less than men of the same age and educational attainment and why is there so little earnings growth for women as they age? The answers involve many factors, some concerning the characteristics and behavior of the female workers, themselves, and others involving employer behavior. On the supply side, for example, women on average have less work experience than men and this difference increases with age. On the demand side, some employers may prefer men for certain jobs and women for other jobs; the jobs for which they will hire women may pay less and may provide fewer opportunities for advancement.

Clearly, supply and demand factors interact with one another. Women may not prepare for jobs for which they believe employers will not hire women; employers may not hire women for jobs for which they believe women are not prepared. But it is clear that, no matter what the causes, the pattern of occupational segregation of the sexes is an important factor in producing and maintaining the wage differential. The pervasiveness of occupational segregation is illustrated in table 1.

Our study of the determinants of occupational stereotyping found that home, family and community have as much or more influence on occupational choice as the school system. But we also found that the schools do help establish the occupational qualifications and aspirations of women, and therefore affect their later earnings.

The Commission's study of disadvantaged women evaluated the treatment of women in vocational education at the same time that it considered their treatment in the education system and in the training programs funded by the Federal Government. There were several reasons to focus on vocational education. First, it is a curriculum whose intent is to prepare individuals for work. Largely because of this employment linkage, it is the only high school curriculum that receives direct Federal funding. Most students who choose the vocational curriculum do not go on to college.

TABLE 1.—OCCUPATION OF EMPLOYED PERSONS, BY SEX, RACE AND HISPANIC ORIGIN, 1978 [1]

	Total	White	Black and other	Hispanic [2]
Females				
Total employed (thousands)	38,882	33,943	4,938	1,677
Percent	100.0	100.0	100.0	100.0
White collar workers	63.2	65.5	47.1	48.2
Professional, technical, and kindred	15.9	15.9	13.8	7.5
Managers and administrators, excluding farm	6.1	6.5	2.9	3.7
Sales	6.9	7.4	3.1	5.3
Clerical and kindred	34.6	35.7	27.2	31.7
Blue collar workers	14.8	14.3	18.6	28.4
Craft and kindred	1.8	1.9	1.3	2.1
Operatives	11.8	11.2	15.8	25.2
Laborers, excluding farm	1.3	1.2	1.4	1.1

TABLE 1.—OCCUPATION OF EMPLOYED PERSONS, BY SEX, RACE AND HISPANIC ORIGIN, 1978 [1]—Continued

	Total	White	Black and other	Hispanic [2]
Farm workers	1.3	1.4	.9	1.5
Service workers	20.7	18.8	33.4	21.8
Males				
Total employed (thousands)	55,491	49,893	5,599	2,704
Percent	100.0	100.0	100.0	100.0
White collar workers	40.8	42.4	26.7	23.6
Professional, technical, and kindred	14.7	15.3	9.8	7.6
Managers and administrators, excluding farm	14.0	14.8	6.5	6.6
Sales	5.9	6.3	2.6	3.2
Clerical and kindred	6.2	6.0	7.8	6.2
Blue collar workers	46.4	45.6	53.6	58.5
Craft and kindred	21.1	21.7	15.4	20.9
Operatives	17.7	17.0	24.6	25.5
Laborers, excluding farm	7.6	7.0	13.6	11.7
Farm workers	4.1	4.2	3.9	4.7
Service workers	8.7	7.8	15.9	13.4

[1] Annual average, as percentage of group's employment, except as indicated.
[2] March 1979 Current Population Survey Estimates.

Sources: U.S., Department of Commerce, Bureau of the Census, "A Statistical Portrait of Women in the United States: 1978, Current Population Reports, Special Studies, Series P-23, No. 100 (1980), p. 112, and "Persons of Spanish Origin in the United States: March 1979, Population Characteristics, Series P-20, No. 354 (1980), p. 29.

Second, while the Federal Government is certainly a junior partner in the funding of vocational education, its contribution has been substantial. Counting not only Vocational Education Act funds, but also Federal funds that flow to vocational education through CETA, Basic Educational Opportunity Grant and other grant programs, the Federal Government may have contributed as much as 25 percent of total public funds for vocational education in 1980.

Third, to a greater degree than in any other education program the Federal Government has already addressed sex equity in vocational education through congressional legislation. Sex equity is one of the four main goals of the Vocational Education Act as amended in 1976, and the Act contains extensive provisions designed to enable State vocational programs to overcome sex discrimination and sex stereotyping.[1]

Before looking at program enrollments among students who take vocational education, it is useful to consider the overall pattern of course-taking by high school students. (See table 2.)[2] While senior men and women took almost the same percentage of their coursework in the humanities in 1972, women took significantly more vocational education and less natural science, including mathematics. Almost all of the vocational/natural science differential can be accounted for by the taking of home economics by women.

In testimony before this Subcommittee on November 13, we pointed out that evidence suggests that consumer and homemaking programs do not contribute to the long-run employability or self-sufficiency of participants and may be harmful to later earnings. For these and other reasons explained more fully in our earlier testimony, the Commission has recommended that separate funding in the Vocational Education Act for consumer and homemaking programs be removed.

We will turn now to a discussion of what is known about the effects of the 1976 amendments to the Vocational Education Act on program enrollments by men and women. Our information is drawn primarily from 3 sources: program data collected by the Department (formerly Office) of Education; the congressionally mandated study of equity in vocational education conducted by the American Institutes for Research (AIR); and a conference on education, sex equity, and occupational stereotyping conducted by the Commission in May 1980.

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[1] Regulations provide the following definitions. "Sex discrimination" means any action which limits or denies a person or a group of persons opportunities, privileges, roles or rewards on the basis of sex. "Sex stereotyping" means attributing behaviors, abilities, interests, values, and roles to a person or group of persons on the basis of sex.

[2] Robert Meyer has conducted research for the Commission on several important questions concerning the labor market and other effects of vocational education, based on nationally representative data from the National Longitudinal Survey of the High School Class of 1972. The table comes from Meyer's work, which is pending Commission publication.

TABLE 2.—PERCENTAGE DISTRIBUTION OF CLASS HOURS BY SUBJECT OF COURSE, HIGH SCHOOL SENIORS, BY SEX, SPRING, 1972

Subject	Women	Men
Natural science	21.1	26.1
Humanities	42.8	43.2
Foreign language	6.7	5.7
Vocational	29.3	24.9
Occupational	23.9	24.9
Home economics	5.4	
Total class hours per week	22.8	22.0
Observations	10,585	10,452

Source: Robert Meyer, Table 37 of "Vocational Education: How should it be measured?" An Economic Analysis of High School Vocational Education, National Commission for Employment Policy, forthcoming.

Although women take as much or more of their coursework in vocational education as men, program enrollments within vocational education are clearly segregated by sex, as shown in program data collected by the Department of Education (table 3). While there have been some changes since 1972, in 1978 women continued to predominate and constitute over 75 percent of the enrollments in three areas: health, home economics, and business and office. Males continue to predominate and constitute over 75 percent of the enrollments in three areas: agriculture, trade and industry and technical. The remaining category—distribution, or retail sales—was about 50 percent female.

As part of its congressionally mandated study of equity in vocational education, the American Institutes for Research (AIR) collected a national sample of approximately 3,300 vocational education students, half male and half female, in public institutions that offer five or more vocational programs. The AIR study estimated the concentration of students by sex in the seven major occupational areas. The study also disaggregated the enrollments within each of the seven broad occupational areas. This breakdown is important because it allows a determination of whether increased female enrollments in a particular broad category, such as trades and industry, occurred because more women enrolled in a predominantly female field like cosmetology or in a predominantly male field such as tool and die making.

TABLE 3.—ENROLLMENT IN VOCATIONAL EDUCATION BY PROGRAM FOR PROGRAM YEAR 1978, AND PERCENTAGE FEMALE BY PROGRAM, 1972, 1976 AND 1978 [1]

Programs	Total	Female	Percent female 1978	Percent female 1976	Percent female 1972
Grand total (unduplicated)	16,704,926	8,419,428	50.4	51.2	55.3
For employment	10,429,827	4,766,802	45.7	36.6	41.1
Agriculture	1,006,542	173,824	17.3	11.3	5.3
Distribution	962,009	495,738	51.5	40.8	45.2
Health	758,808	591,764	78.0	78.7	84.6
Occupational home economics	459,590	378,965	82.4	84.7	86.0
Office	3,312,475	2,506,368	75.6	75.1	76.3
Technical	527,681	93,001	17.6	11.3	9.7
Trades and industry	3,402,722	527,142	15.4	12.7	11.6
Consumer and homemaking	3,659,441	2,946,101	80.2	83.2	92.1
Special programs	3,509,351	1,139,720	32.5	33.8	44.7
Guidance	1,508,189	702,036	46.5	48.8	(2)
Remedial	101,904	45,844	45.0	44.1	42.3
Industrial arts	1,492,790	256,611	17.2	11.4	(2)
Other N.E.C	406,468	135,229	33.3	21.2	(2)

[1] Based on figures from U.S. Office of Education Summary Data for 1972, 1976 and 1978. As of January 1981, 1978 was the latest year for which the National Center for Education Statistics was able to provide national summary data for vocational education. Data collected by the Office for Civil Rights in the fall of 1979 from institutions with five or more vocational programs is not directly comparable to national summary data.

[2] Not provided in summary data for these categories in 1972.

Source: U.S., Commissioner of Education, "Status of Vocational Education in Fiscal Year 1978, A Report to the Congress by the U.S. Commissioner of Education," (n.d.); U.S. Department of Health, Education, and Welfare, Office of Education, Bureau of Occupational and Adult Education, Office of Adult, Vocational, Technical and Manpower Education, Division of Vocational and Technical Education, "Summary Data, Vocational Education, Program Year 1978" (Washington, D.C.: U.S. Department of Health, Education, and Welfare, n.d.).

AIR compared their data with that from the Office of Vocational and Adult Education (OVAE and formerly Bureau of Occupational and Adult Education) annual data and a special 1974 Office of Civil Rights Survey of area vocational schools.[3] The data appear to converge on the following patterns. First, the apparent downturn in the concentration of women in business and office, occupational home economics, and health between 1972 and 1976 appears to have leveled off by 1978. Second, while the participation of women in traditionally male programs in agriculture and technical occupations has continued to increase modestly, the particpation of women in predominantly male programs in trades and industry has leveled off. Third, the movement of women into programs that had been predominantly male has been more marked than the movement of men into programs that had been predominantly female. Apparently, continued efforts are necessary if progress is to be made toward enrolling women in training for occupations that have been predominantly occupied by men.

One difficulty in assessing progress toward sex equity in vocational education is the determination of how quickly changes in enrollment should be expected. It appears that greater changes have been effected in the career aspirations of college-bound girls than in those of girls who do not go on to college. For example, the female percentage of law degrees conferred rose from 5 percent in 1969–70 to 29 percent in 1978–79, and the female percentage of medical degrees conferred rose from 8.4 percent in 1969–70 to 23 percent in 1978–79. These changes are much more dramatic than enrollment changes found in vocational education programs.

The AIR study addressed whether schools could make a difference in encouraging nontraditional enrollments, considering the powerful influences of sex-role socialization on the aspirations of young people. The study found that when schools conducted programs to encourage students to enter nontraditional programs, more students did so.[4]

Consistent with the AIR finding that schools can be successful at encouraging students to take nontraditional programs were the observations of several participants in a Commission-sponsored conference on education, sex equity, and occupational stereotyping.[5] While describing sex equity efforts in New York, sex equity coordinator Carol Jabonaski listed several factors that are contributing to a successful program in her State. Jabonaski, who has a staff of seven and a budget that includes both Federal and State funds, was appointed to her position promptly after enactment of the 1976 amendments and thus had time to develop specific programs. She reports directly to the State Director of Vocational Education and thus commands a relatively senior position in the State education hierarchy. The New York case appears to confirm that when a State makes a real commitment, backed up with adequate funding, reduction in sex stereotyping does occur.

This subcommittee is especially concerned with the effects of the sex equity provisions of the 1976 amendments to the Vocational Education Act. The foregoing evidence suggests that the sex equity provisions have helped promote discernible progress toward moving women into programs that have been predominantly male.

While substantial information is already available, it should be recognized that any new legislation takes time to be implemented fully. Regulations implementing the 1976 legislation were not available until October 1977, so that from VEDS (Vocational Education Data System) program data we have only 1978–79 as a point of comparison with what was happening before the 1976 amendments. The VEDS office has indicated that 1979–80 data should be released soon. That data should be examined carefully for information it may yield about the effects of the 1976 amendments.

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[3] In September 1979, the Office of Civil Rights of the Department of Education conducted another survey of vocational schools. While not strictly comparable to the 1974 OCR survey, the trends in female enrollments are similar to those shown in OVAE data.

[4] American Institutes for Research, "The Vocational Education Equity Study," Laurie R. Harrison et al., vol. 1: Primary Data (Washington, D.C.: American Institutes for Research, April 1979), p. 376.

[5] "Education, Sex Equity and Occupational Stereotyping," Conference Report, Special Report No. 38, National Commission for Employment Policy, Washington, D.C., October 1980.

As new data becomes available we need to examine the experience of women in vocational education more carefully. There has not been a systematic national study of labor market outcomes for women who undertook vocational education in predominantly male programs, simply because so few women took such programs. The new cohorts of high school students should be examined for these effects.

We believe that Congress acted in a timely and forward-looking way in 1975 when it held oversight hearings on sex equity in vocational education that led to the sex equity provisions of the 1976 amendments. Our study found, however, that the laws and regulations providing for sex equity in vocational education have not been vigorously enforced. As a result, progress toward the achievement of sex equity in vocational education has been slow. Both the Office for Vocational and Adult Education (OVAE) and the Office for Civil Rights (OCR) need to strengthen their enforcement activities. We urge this Subcommittee to keep the provisions for sex equity in the legislation, for without strong enforcement provisions in the statute, we do not believe that the slow progress toward increasing nontraditional enrollments will be sustained.

In conclusion, the Commission's study of disadvantaged women evaluated the treatment of women in vocational education at the same time that it considered their treatment in the education system and in the training programs funded by the Federal Government. Certain problems—especially the tendency to train women in a limited number of programs—appear to be endemic in all these institutions. We do not expect marginal changes in vocational education to result in massive changes in society or in the occupations women hold. But because vocational education already affects the occupational qualifications and aspirations of women, we believe it ought to do a better job of encouraging women to obtain training in fields that offer higher rates of pay than most predominantly female occupations.

National Commission for Employment Policy

Increasing the Earnings of Disadvantaged Women

The National Commission for
Employment Policy
Report No. 11
1522 K Street, NW
Suite 300
Washington, D.C. 20005
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II. TEXT OF RECOMMENDATIONS

A. A National Effort to Increase the Earnings of Disadvantaged Women

The National Commission for Employment Policy has long sought ways of helping economically disadvantaged people prepare for and obtain better jobs. The labor market problems of women have been of increasing concern to the Commission. Despite the rapid movement of women into the labor force, women and households supported by women account for a disproportionate amount of all poverty in America. As documented in the accompanying staff report, half of all poor families are maintained by women.

One facet of the problem is that women, on the average, who work outside the home earn far less than men. For example, in the third quarter of 1980, the average weekly earnings of women working full time were $200, only 64 percent of the earnings of men. The average earnings of employed black and Hispanic women were even lower. To raise the earnings of women will require actions on many fronts. The Commission, in this report, is focusing on one approach, albeit a critical one: strengthening the preparation of disadvantaged women through vocational education and employment and training systems to improve their access to better jobs.

The Commission calls upon the new Administration and the 97th Congress to review this report and its recommendations and to take early remedial action. The Commission is impressed by the potential contribution of vocational education and employment and training programs to prepare disadvantaged women for better jobs and by the steps that have already been taken to do so. Nonetheless, more can and should be done. The Commission's recommendations focus on actions that lie within the province of the Federal Government. However, success in overcoming the problems faced by disadvantaged women will also require the ongoing commitment and cooperation of other levels of government, the educational authorities, employers, and the support of the public at large.

B. Sex Equity in Education

Occupational stereotyping is a complex phenomenon with roots deep in the social structure. Home, family, and community have as much or more influence on occupational choice than does the school system. It is unreasonable to expect the educational system alone to be successful in combating sex-role stereotyping. But it is reasonable--and critical--that the education system respond more effectively to the needs of a society in which family roles and the labor market are changing rapidly.

The socialization of sex roles in elementary and secondary schools takes many forms. Teachers often treat boys and girls differently in the classroom; textbooks portray men and women in different occupations; guidance counselors offer different advice to members of the two sexes; young women in high school tend to select fewer math and physical science courses than young men. These differences influence in varying degrees the career preparation of young women from every income level, regardless of whether they go on to college.

The recommendations presented below address sex equity issues in vocational education. Vocational education is a curriculum intended to facilitate movement from education to employment, particularly for students who are not planning to attend college. Hence, it can be especially important for youth from low-income families. Although most of the funds for vocational education are provided by State and local governments, Federal support has been provided since 1917. The Vocational Education Act expires at the end of fiscal year 1982. As the Administration and Congress consider reauthorization, it is important that they focus on the role of vocational education in improving the earnings of youth, including young women, from economically disadvantaged families. The first five recommendations are addressed to the Congress, especially as it considers the reauthorization of the Vocational Education Act. Recommendations 6 through 10 are directed to the Department of Education.

1. Congressional Review*

Congress acted in a timely and forward-looking way in 1975 when it held oversight hearings on sex equity in vocational education that led to the sex equity provisions of the 1976 amendments. As a result, the Vocational Education Act (hereafter the Act) is specific in both the emphasis which the States should place on sex equity in vocational education programs and on a range of mechanisms for encouraging the States to promote sex equity. The sex equity provisions of the Act were intended to supplement the general provisions of title IX of the Education Amendments of 1972 that prohibit discrimination on the basis of sex in any program receiving Federal education funds. The major stumbling block to fulfilling congressional intent to implement sex equity in vocational education is lack of enforcement at the Federal, State, and local levels.

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*Since the Department of Education is in the process of developing legislative proposals for the reauthorization of the Vocational Education Act, it would be inappropriate for it to support specific recommendations to the Congress on the reauthorization at this time. Therefore, the Department does not take a position on Recommendations 1 through 5.

Recommendation 1: Congress, which will soon consider the renewal of the Vocational Education Act, should again focus attention on the treatment of women in vocational education. Hearings should be held on the progress that has been made as a result of the past amendments and on the identification of barriers that remain. Based on such hearings, Congress will be better positioned to decide on how to strengthen the enforcement provisions of the statute.

Sufficient information already exists to make several more specific recommendations with regard to reauthorization. As a result of congressional mandates, several studies have been undertaken or are underway concerning sex equity in vocational education. In addition, new data on participation in vocational education programs by sex have been collected by the Vocational Education Data System and by the Office for Civil Rights at the Department of Education. However, no overall report has been issued evaluating the Nation's progress in opening new occupational opportunities for women through vocational education.

Recommendation 2: Congress should request the Secretary of Education to submit a report describing the progress that has been made in implementing the sex equity provisions of existing education legislation and the actions that the Department has taken in response to the studies of sex equity that it had earlier funded. This report should be available in time for the above-mentioned hearings and Congress should request that a followup report be submitted within 3 years.

The Vocational Education Act requires each State to submit a Five Year Plan that in part sets forth policies and procedures which the State will follow to move toward sex equity in vocational education. The Act emphasizes procedures and planning, but devotes insufficient attention to outcomes.

Recommendation 3: Congress should consider amending the Vocational Education Act to require that the annual plans and accountability reports submitted to the Department of Education by the States should specifically address the progress that is being made in achieving sex equity.

2. Consumer and Homemaking Programs

Consumer and homemaking programs receive a special set-aside in the legislation of over $40 million annually. This is the only program-specific set-aside in the Vocational Education Act. This set-aside does not appear to contribute significantly to the long-run employability or economic self-sufficiency of women or men. Selection of a curriculum that does not add directly to the employability skills may preclude an individual from taking other vocational programs that are more directly job relevant. Consumer and homemaking programs should compete for funds with the other vocational education programs. Such competition will not interfere with States that want to continue to fund these programs.

Recommendation 4: Separate funding in the Vocational Education Act for the Consumer and Homemaking Programs should be removed. These programs should compete for funds out of each State's basic grant.

3. Model Programs

The law authorizes the Secretary of Education to make grants to the States to conduct a variety of activities designed to strengthen vocational education programs. These include research, curriculum development, personnel training, vocational guidance, counseling, and exemplary and innovative programs. The law sets forth within each of the above categories projects to overcome sex stereotyping and to promote sex equity. It further requires States to give priority in funding exemplary and innovative programs to those designed to reduce sex stereotyping in vocational education. In program year 1978, $64 million was distributed to the States for these activities, but only $1 million was used for grants specifically aimed at overcoming sex bias.

Recommendation 5: Congress should require that a specific amount of the basic grant funds provided to the States under the Vocational Education Act be used for the development of model programs to overcome sex stereotyping.

4. Implementation by the Department of Education

The sex equity provisions of the Act are primarily directed toward the States. There are five major requirements placed on State vocational programs. In abbreviated form, these are: designation of a full-time Sex Equity Coordinator; inclusion in the State Five Year Plan for vocational education of policies and procedures to assure equal access to programs by men and women and to overcome sex bias, sex stereotyping and sex discrimination; inclusion in the State Annual Plan of a report on compliance as described in the Five Year Plan; assurance of represention of women's issues on State and local vocational education advisory councils; and collection of data and evaluation of programs for service to women.

One of the four major purposes of the Act is "to develop and carry out such programs of vocational education within each State so as to overcome sex discrimination and sex stereotyping in vocational education programs . . . ." Given the large number of requirements placed on States, and the magnitude of the job to be done, one should not expect these requirements to be fulfilled without continuing oversight and assistance from the Federal Government. The legislation is specific about what States must do, but less so about the role of the Department of Education in promoting sex equity in vocational education. The assignment of Departmental personnel to provide information, coordination, technical assistance and oversight of State planning and evaluation as they relate to sex equity appears to be inadequate.

Recommendation 6:	In order for the Department of Education to carry out its Congressional directive on sex equity in vocational education, the Secretary of Education should assign adequate staff to the function.
Recommendation 7:	The Department of Education should improve the dissemination through the State Sex Equity Coordinators of: (1) research findings concerning sex equity in vocational education; (2) information about model programs; and (3) other information that would assist State and local authorities to achieve sex equity in vocational education.

The laws and regulations providing for sex equity in vocational education have not been adequately enforced. As a result, progress toward the achievement of sex equity in vocational education has been too slow. Both the Office for Vocational and Adult Education (OVAE) and the Office for Civil Rights (OCR) need to strengthen their enforcement activities.

OCR has responsibility for vocational education under the authority of title VI of the Civil Rights Act of 1964, which prohibits discrimination in any program or activity receiving Federal assistance, and under title IX of the Education

Amendments of 1972, which prohibits discrimination on the basis of sex in education programs receiving or benefiting from Federal financial assistance.

Ensuring compliance with civil rights legislation is only the first step in achieving sex equity in vocational education. Considering the lengthy history of sex-segregated patterns in vocational education and in the labor force, these patterns are likely to be continued by sex-stereotyped attitudes of students and staff even after the most blatantly discriminatory practices are eliminated by enforcement of title IX. If sex-stereotyped patterns are to be eradicated, active efforts must be taken to encourage students of both sexes to reevaluate sex stereotypes and to pursue for themselves the equal opportunities guaranteed by law.

While OCR is charged with the primary responsibility for enforcing the relevant civil rights legislation as it bears on sex equity in vocational education, OVAE has the primary responsibility for enforcing the sex equity provisions of the 1976 Vocational Education Act. Some coordination has taken place, but the enforcement process remains slow and cumbersome. An integrated effort by OVAE and OCR could lead to a much stronger enforcement process.

Recommendation 8: The Secretary of Education should direct the Office of Vocational and Adult Education and the Office of Civil Rights to recognize equity in vocational education as a priority goal and to work together in the enforcement effort.

5. Supportive Services

Currently, the law gives States the option of using basic grant money to: (1) "provide support services for women who enter programs designed to prepare individuals for employment in jobs which have been traditionally limited to men, including counseling as to the nature of such programs and the difficulties which may be encountered by women in such programs, and job development and job followup services" and (2) "day care services for children of students in secondary and postsecondary vocational education programs." Few States are actually providing funds for supportive services, including day care. Unfortunately, without such supportive services, it is often impossible for the most disadvantaged women--pregnant teenagers, displaced homemakers, and single heads of household--to enter and pursue vocational education.

Recommendation 9: The Department of Education should encourage States to improve their coordination with providers of social services (including child care under title XX of the Social Security Act) to ensure that individuals are not denied access to vocational education due to the lack of availability of supportive services.

6. Sex Equity Coordinators

One of the requirements of the Act is that each State must designate a Sex Equity Coordinator to assist the State board in promoting sex equity. Their functions include: creating awareness and providing information regarding sex equity problems and solutions; gathering and analyzing data; taking action to overcome sex bias, discrimination, and role stereotyping; reviewing all vocational programs and all grants and contracts; provision of technical assistance to local education agencies; reviewing title IX self-evaluations and the State Plan for Vocational Education; and monitoring the implementation of equal employment laws as they relate to vocational education. Each State is required to spend not less than $50,000 out of its basic grant to support the Sex Equity Coordinator.

Experience has varied but, considering its modest size, this program has been quite successful in promoting awareness of sex equity problems in vocational education. In addition, the Sex Equity Coordinators have been effective in assisting local education agencies and other institutions that deliver vocational education in their efforts to expand vocational education opportunities for women.

Recommendation 10: The Department of Education should encourage States to supplement Federal funds to support the work of Sex Equity Coordinators. State education agencies should involve these coordinators in the development of State vocational education plans, as well as in their review.

C. Employment and Training Programs

Federally funded employment and training programs are important mechanisms for helping economically disadvantaged women prepare for better paying employment. The recommendations made here are directed toward the improvement of the quality of services provided by CETA and other programs (Recommendations 11-14) and the expansion of access of women to the programs (Recommendations 15-20).

Many of the issues raised in the Commission's examination of the treatment of women are relevant to the treatment of disadvantaged men as well. For both groups, the underlying question is how to use employment and training programs more effectively to increase the long-run earnings of the participants. For women more than men, though, there is the added concern that long-term success will often require helping those who wish to move out of the narrow range of low-wage jobs where most of them are crowded. CETA, the Work Incentive (WIN) program, and related programs can be used, as they have been, to assist in the achievement of this goal. But more needs to be done.

1. Preparation for Better Paying Occupations

There is a pressure both from Congress and the Administration to use limited employment and training funds to serve as many people as possible and to place participants as quickly as possible into unsubsidized employment. However, such short-term objectives can conflict with the long-term goal of helping disadvantaged people prepare for occupations that will enable them to become and remain self-sufficient. For women, a quick placement is more likely to be in a traditionally female, lower paying job. Achievement of self-sufficiency will require that many undergo special preparation for a wider range of occupations.

At present, program operators have few, if any, incentives to conduct intensive training that will have a long-run impact on an individual's earnings, even if the benefits exceed the costs. In fact, there are several disincentives. For example, assessments rely heavily on numbers of participants and costs per placement, rather than on the quality of placement. CETA reporting systems do not include information on the quality of placement. Evaluations of programs, until recently, focused on short-run measures of success, such as positive terminations or placements in unsubsidized employment.

However, CETA amendments in 1978 and recent regulations promulgated by the Department of Labor recognize the importance of using the program to widen the range of occupations available to disadvantaged women. Prime sponsors are instructed to find ways of overcoming sex-role stereotyping and artificial barriers to employment and to take affirmative steps to move women into predominantly male occupations (and vice versa). Nonetheless, the CETA system provides no rewards for prime sponsors who succeed.

Similarly, WIN has a strong emphasis on placement regardless of job quality. Local programs are evaluated on short-run performance standards that stress immediate placements but do not address their quality. The disbursements of a large percentage of WIN funds (i.e., the discretionary allocations) are based on these performance standards. Besides ignoring the type and quality of placements, this disbursement formula has a negative impact on the quantity of services to women as it discriminates against those localities whose eligible population has an overrepresentation of those who are most difficult to serve.

Moving women into nontraditional jobs is not easy. But difficult though it may be, it is not impossible. There are numerous nontraditional programs that have been successful at a relatively low cost, placing women in nontraditional, higher paying jobs.

Recommendation 11: Congress and the Department of Labor should enable employment and training programs to provide opportunities for intensive training leading to a regular job, even if such actions increase the cost per participant.

Recommendation 12: The Department of Labor should evaluate CETA prime sponsors and the officials responsible for the Work Incentive (WIN) program on the quality of services provided to participants in training programs. In order to do so, the Department should routinely collect information on the quality of services that are provided.

Recommendation 13: The Department of Labor should disseminate information about programs that are enabling women to obtain nontraditional, higher paying jobs. Organizations with experience in operating such successful nontraditional programs should be used to provide technical assistance to other program operators.

2. Linkage to Unsubsidized Employment

CETA and related training programs can help move disadvantaged women into better jobs only if women acquire the requisite skills and are assisted in their placement. Effective linkages between employment and training programs and the private sector can facilitate this process. In 1979, the Department of Labor initiated a project to link firms that are not in compliance with Executive Order 11246 with Federal employment and training programs. Through this project, women (and minorities) who have been trained for nontraditionally female (and nontraditionally minority) occupations can be referred to employers who seek to increase their employment of such persons. This Employment and Training Administration - Office of Federal Contract Compliance linkage project, while still in its developmental stage, should be encouraged. One early finding suggests that, while firms have an incentive to participate, prime sponsors do not.

Recommendation 14: The Department of Labor should encourage prime sponsors to participate in the Employment and Training Administration - Office of Federal Contract Compliance (ETA-OFCCP) linkage project to facilitate the placement in unsubsidized employment of women who have been trained in nontraditional occupations.

3. Serving Significant Segments of the Eligible Population

CETA prime sponsors are required to identify and equitably serve significant segments of their eligible population, including women. There are numerous obstacles to their doing so, including various provisions of the CETA law, regulations and program operations, and other laws, regulations and procedures that affect CETA program operations. The recommendations presented below are intended to make CETA and related programs more accessible to disadvantaged women. These recommendations involve: the Department of Labor's assessment of prime sponsor plans and program activities (15), supportive services (16), women who have recently been separated (17), CETA national programs (18), the preference for unemployed fathers in WIN (19), and age limits in apprenticeships (20).

Currently there is little or no substantive monitoring of prime sponsors to assure that significant segments of the population are equitably served. Since Congress is particularly concerned with eliminating fraud and abuse, the majority of the Department's monitoring is limited to that area. Prime sponsors should also be monitored on their provision of services, so that all key groups receive their fair share of services to which they are entitled under the law. Congress placed the responsibility for the substantive monitoring of CETA programs on the Department of Labor. The Department should develop a well-defined process for substantive monitoring of annual plans and program activities and a list of sanctions that might reasonably be imposed upon prime sponsors who repeatedly underserve significant segments and who refuse to take corrective action.

Recommendation 15: The Department of Labor should undertake a substantive review of the plans and program data of CETA prime sponsors to be sure that significant segments of the eligible population are being equitably served. The Department should take corrective action in cases where prime sponsors repeatedly underserve one or more key groups.

4. Supportive Services

One way to improve the economic situation of disadvantaged women is to encourage them to participate in CETA. But in many cases this participation is conditional on receipt of certain supportive services, such as counseling, child care, and transportation. Provision of these services increases the per capita costs associated with placements.

Currently, there is no national performance assessment system in CETA that provides the basis for the disbursement of funds to prime sponsors. However, performance data such as cost per placement are reported to the national level by prime sponsors, and subcontractors are often evaluated on the basis of such measures. These types of performance standards may inhibit program operators from serving those who are more expensive to serve and who are often most in need. The Department is currently involved in the development of a set of national performance standards. In this process, it should ensure that incentives not be created to avoid serving those most in need. One possibility is to broaden performance indicators to account for the differences in the demographic characteristics of the prime sponsor's eligible population; the composition of these characteristics affects traditional performance measures. Another possibility is to require the reporting of and evaluation of prime sponsors on performance measures for certain subgroups (e.g., women, handicapped, teenage mothers, and disabled veterans) so that a prime sponsor cannot boost the overall performance measures by including in the program an overrepresentation of those who are least costly to serve.

Some of the costs of supportive services, such as child care, need not be paid with CETA funds. Local program operators should be encouraged to coordinate their activities with other sources of support, including title XX of the Social Security Act.

Recommendation 16: CETA prime sponsors and their subcontractors should ensure that women are not prohibited from participation by lack of supportive services. The Department of Labor, in constructing its national performance assessment system, should ensure that disincentives are not created to serving persons who may require child care, transportation, counseling, or other supportive services.

5. Recently Separated Women

One group that often is in urgent need of preparation for employment is women who have been recently separated from their husbands. They frequently are not eligible for participation in CETA employment and training programs because of the way that the regulations define family income. The income determination period is the previous six months. During any part of that period in which a woman was living with her husband, the husband's income must be included. Hence, the husband's income affects the eligibility of a separated woman for CETA services for up to six months after the separation occurred.

Recommendation 17: The Department of Labor should reassess the method by which family income is calculated in determining the eligibilty of recently separated women for CETA participation. Such women who live in poverty should be eligible to participate in CETA.

6. National Programs

Under title IIIA of CETA, the Department of Labor administers national programs that fund a wide array of activities. These include training and employment-related services to groups that are experiencing particularly severe disadvantages in the labor market and activities to strengthen and improve the effectiveness of the CETA system itself. The legislation specifically identifies ex-offenders, persons of limited English language proficiency, handicapped, women, single parents, displaced homemakers, youth, older workers, individuals who lack educational credentials, public assistance recipients, Native Americans, migrant and seasonal farm workers, veterans, and other persons whom the Secretary deems to be in need of such services.

In addition to being designated as a specific group in need of services, women also account for the vast majority of such groups as single parents, displaced homemakers, and public assistance recipients, and close to half of the other groups, except for veterans and ex-offenders.

Adequate data on program activities and on the characteristics of participants are not available. However, of the national program funds over which the Department of Labor has some discretion (that is, excluding funds for Native Americans, migrant and seasonal farm workers), about one-third goes to programs with a low goal for women (20 percent) and an additional one-seventh goes to a program for veterans.

There are several options for increasing the funds and services going to women in title IIIA. First, the Office of National Programs could seek to increase the proportion of women in their current programs. Second, they could fund more programs whose main purpose is to serve the employment needs of disadvantaged women. Third, national women's community-based organizations (CBOs) could receive funds under "Operational Funds for Community-Based Organizations," a program funded in title IIIA whereby national CBOs receive funds to provide technical assistance to their local affiliates. Fourth, operators of successful nontraditional programs for women could be funded to provide technical assistance to title IIIA grantees and to prime sponsors on how to overcome sex stereotyping and how to accelerate the movement of women into nontraditionally female, higher paying jobs.

Recommendation 18: The Department of Labor should seek to increase the participation of women in the national programs funded under title IIIA of CETA. The Office of National Programs should monitor programs within its jurisdiction and should take corrective action when such programs repeatedly fail to meet their goals. To do so, the Office of National Programs should require such programs to report information on the characteristics of participants, including sex, race, and national origin.

7. Work Incentive Program

The Work Incentive (WIN) program is designed to help recipients of Aid to Families with Dependent Children obtain employment and become self-sufficient. Three-quarters of all persons registered in WIN are female, but a slightly smaller proportion of the persons placed in employment are female. Some of the disparity is due to an explicit preference in the legislation given to unemployed fathers over all other WIN registrants. In view of the trend away from gender-specific distinctions in legislation, this preference is anachronistic and should be eliminated.

Recommendation 19: Congress should eliminate the preference given unemployed fathers over all other Work Incentive (WIN) program registrants.

8. Apprenticeships

Upper age limits in apprenticeship programs limit the access of women to preparation for many skilled occupations. Currently many programs require that persons be under the age of 26 in order to be eligible for an apprenticeship. Women are more likely than men to be adversely affected by such age limits because: (1) they have been discriminated against in their younger years in gaining access to such programs and thus often apply at older ages; (2) often, young women do not develop nontraditional career aspirations until they reach their mid-twenties (after a few years working at a low paying traditionally female job or when they are mature enough to go against societal norms); and (3) they may have experienced interruptions in employment for childbearing reasons (or may have worked only part time during their early twenties).

Lifting the age limit might also increase the number of minority males who would enter apprenticeship programs. Many minority males, especially those who were raised in ghettos, might not apply for apprenticeships until they are older. Indeed, many apprenticeship programs have had to increase their upper age limits to attract minority males to meet goals set by the Department of Labor. Veterans constitute another group who may need to apply at a later age. But they often are already given an exclusion from the age limit, along with current employees. Having rectified the problem for some older workers, it is difficult to justify an upper age limit on the ground of business necessity for other groups.

The Department of Labor's Bureau of Apprenticeship and Training continues to register apprenticeship programs with upper age limits. In September 1980, the Equal Employment Opportunity Commission proposed to eliminate the exemption of apprenticeship programs from the jurisdiction of the Age Discrimination in Employment Act. However, in January the Commission, in a tie vote, failed to make the proposed rule final.

Recommendation 20: The Bureau of Apprenticeship and Training of the Department of Labor should no longer register apprenticeship programs that have upper age limits on participation. The Commission supports the guidelines earlier proposed by the Equal Employment Opportunity Commission to eliminate the exemption of apprenticeships from the Age Discrimination in Employment Act and urges the EEOC to promulgate these guidelines.

Mr. **Miller**. The next is Carol Jabonaski.

STATEMENT OF CAROL JABONASKI, COORDINATOR, OCCUPATIONAL EDUCATION, CIVIL RIGHTS UNIT, NEW YORK STATE DEPARTMENT OF EDUCATION

Ms. **Jabonaski**. Mr. Chairman, and members of the subcommittee, I am pleased to have this opportunity to share with you some of the activities that have happened in New York State as a result of the 1976 amendments.

I was formerly the sex equity coordinator for the State, and have recently moved into a new position. New York State in addressing the mandates, I believe, took a very pro-active role.

I will try quickly to summarize some of the accomplishments, identify some of the problems that we see that still exist, and some of the recommendations that we feel are important.

The office was established very quickly after the legislation was enacted. Funds were allocated in a variety of categories, including grants to overcome sex bias. It was through that system that we were able to create many different kinds of programs and activities which have had an impact in the State.

As you look at each of the responsibilities we targeted funds for implementation of activities to meet those mandates.

Under creating awareness, we have conducted workshops and seminars, a variety of programs and presentations throughout the state. A major activity was a six-credit course which is offered each year on a statewide basis.

We have had 800-plus vocational educators take that program. As a part of the program, they are required to work with local school people or students and they have made about 178 contacts.

We also established a resource center, a statewide resource center. We have prepared resource materials such as a youth group kit which talks about youth organizations and implementing sex equity through the youth organizations.

We have prepared "An Expanding Role, Adolescent Expectations," which is a source book of teachers. We have distributed over 20,000 copies of that book statewide and nationally.

We have prepared film strips which have been used in local schools and vocational centers throughout the State. We have also prepared two films which have had quite an impact in our State, one called "Turning Points," which is a documentary on women returning to the postsecondary level for occupational training.

We are very pleased that that film received an American Film Festival award.

"A Man's Place" was a second followup film which dealt with social changes that men are now undergoing. We have found a great need in addressing the needs of men as we take a look at total sex equity.

We had a poster contest and we have prepared and distributed 150 copies of a news letter called "Voice" throughout the State. That goes out about three times a year.

We did a comic book for elementary children to try to bring to them some of the concepts that we are talking about in eliminating sex bias and stereotyping, and distributed somewhere over 100,000 copies of that comic book.

We have recently had a conference in our State pulling together many of the people who have implemented programs locally. About 370 people attended that conference. We have also had several people from other States participate.

As we took a look at section B, which is gathering and analyzing data, we found that there were some problems in the data base that we were using. Data was not collected in a form at the beginning of our work so that it could be compared from one year to another.

So we have still had some problem with that. But as we have looked at the data and have done some analysis, we have discovered that we really have only three programs left in the State that are actually single-sex enrollments. No cross-sex enrollments in any of those programs.

Those programs do change, however, from year to year. This last year, it was automotive technology, tool and diemaking were two of them. But we have seen that some change has taken place in agriculture, technical trades, and industries which were previously dominated by males.

Since 1976, there has been an increase of 6 percent in agriculture, 6.1 percent in technical, and 6.4 percent in trade and industry, an increase of females entering those programs. There are charts in the prepared testimony that spell all of that out.

In developing strategies to correct the problems, we felt that it was important to have a system that would be statewide that would have all the schools. So we have implemented a system of action planning.

Every school district, every occupational center, postsecondary institution, and all of the large industries are required to do an action plan, how they are going to implement sex equity within their schools.

That plan is used as a criteria for vocational education funding. We have a tremendous success in seeing activities actually being implemented and change taking place at the local level through that planning process. We feel it is because of the planning process that many of the people across the State, at least, know and understand what the issue is, what the problems are, and how to begin to address those problems.

We have also funded 115 programs over the last few years, model programs that have helped set the base for how you actually go about creating change.

In reviewing the distribution of grants, we have a system built into our regular review process so that as we have reviewed each grant that has come into the state for VEA funding, somewhere over 3,000 grants, there is a system where each grant is reviewed to insure that there is no bias or stereotyping or sex discrimination.

Those grants are reviewed by all of the staff who have that as a regular responsibility, and then are surveyed by the sex equity and civil rights staffs. In reviewing programs, we have focused in on 100 institutions, asking people within the agency itself after having been trained and looking for sex bias issues, to review those programs.

In addition to that, the State has in response to the OCR guidelines, developed a unit, civil rights unit. We do on a regular basis a review of all programs, not only for sex discrimination, but for race and handicap discrimination as well.

As we have done those reviews of local programs, we have found that there is still sex stereotype materials being used, guidance and counseling procedures which are still stereotyped.

Some districts have not yet even completed the requirements of title IX. We find that many counseling practices that go on are still predicting students success based on gender.

There are certainly a variety of other kinds of areas of discriminatory practices which we have also found.

Monitoring the implementation of laws prohibiting sex discrimination in hiring and firing was one of the greatest challenges for us in our State as we are a very large State and we have 700-plus institutions plus postsecondary institutions.

We found as we took a look at the information in 1976 that there were only five female superintendents and only one female occupational education director in the State out of some 798 school districts and out of some 660 occupational directors.

We have implemented the job network information service, a system whereby we provide job information to the school districts. This is on a voluntary basis. We have had tremendous success with the system.

In 1978, we advertised 332 administrative vacancies. In 1980, 544. So far this year, about 415 vacancies, administrative positions, have been advertised. We also have the candidate pool where we have both men and women registered in the pool who are looking for a job. Then we publish that list. It is sent to all of the school districts or to anyone hiring administrators.

We find that as we have looked at the data, one of the problems that school superintendents were having is they claimed there were no women available or prepared for high level administrative positions. So as we did an analysis for one year, we discovered that there were 4,000 women in our State who did have the certification required for those positions.

When you find that you have only five who are employed, it seems to me that there is something happening not to utilize those people who were prepared.

We now have 20 females who are school superintendents. For the first time this year, we have a black female in upstate New York. We have now three females who are occupational directors moving up from the one.

Assisting local agencies in improving vocational opportunities for women, we have implemented several programs dealing with displaced homemakers, single heads of households, special projects, counseling centers have been set up.

Job training programs have been set up. Special seminars have been instituted around the State. They have had tremendous success in getting large numbers of women to come in and begin job training. Many will come in initially for the seminars and then the numbers dwindle down as they begin to actually dig in for job training and look for jobs.

We may serve probably 24 to 30 women in each of those programs and we have had tremendous success in employing them. We find that when the women have been employed or trained in the nontraditional positions, that it is very easy to find positions for them. Especially at the postsecondary level.

We have also conducted a study for displaced homemakers to give us an idea of the numbers we might be talking about and how we might allocate additional funds to serve that group. We have discovered that there are approximately 680,000-plus displaced homemakers in the State with that number increasing by about 57,000 a year.

We find that that is an area where we have to spend more resources and time in order to meet those particular needs.

The next function is to make available to the general public information. This is generally very difficult to do in a very large State, and outside of running a column in the New York Times or something on the Today Show every week, we were not sure how we were going to respond to that.

But the department did respond in that we put out a number of publications and news letters which go out on a continuous basis through the education department, as well as locally.

We have encouraged all of the local agencies to continuously advertise what it is they are doing, to put articles in the newspaper, and to make people locally know and understand the accomplishments which are going on.

The self-evaluations under title IX are reviewed by our State agency. Any local district requesting vocational education funds must have their title IX self-evaluation on board. We have reviewed about 260 of those to date.

As you take a look at the accomplishments, and we have had many, we see that there are still problems. There are still some gaps in reaching students, helping them to understand that they have an opportunity to select job training programs or career options which are not based on traditional stereotypes. It takes a long time to overcome those social factors.

It also takes a great deal of time to change the attitudes of teachers and administrators and parents. We have seen, those, as the economy has changed, and we find that more women are moving into the labor market, that need is beginning to move down to younger women. We find certainly that it is much easier to talk with older women who have been out in the labor market and who have seen that there are more financial gains and opportunities in going into nontraditional programs.

That is still an area we need to work very hard on with secondary students. As we have taken a look at vocational education and realizing that it is a link between school and the world of work, we are concerned that the female population be well served and that they be given an opportunity as anyone else is given an opportunity for advancement and for job training that will be meaningful for them.

New York State would like to make three very general recommendations. First, that the vocational education amendment should continue to promote sex equity in both planning, program and funding. Second that funding and program requirements for sex equity should be integrated into the entire vocational education system for greatest effectiveness, and third, that vocational education priorities must be targeted to meet the needs of special groups, displaced homemakers, pregnant teenagers, single heads of households and men and women entering nontraditional jobs.

We feel that the achievements made in the last 5 years will continue and we will be able to emphasize the efforts and the commitments which have been made around the country. Thank you.

[The prepared statement of Carol Jabonaski follows:]

PREPARED STATEMENT OF CAROL JABONASKI, COORDINATOR, OCCUPATIONAL EDUCATION CIVIL RIGHTS COORDINATING UNIT, NEW YORK STATE EDUCATION DEPARTMENT

SEX EQUITY IN VOCATIONAL EDUCATION IN NEW YORK STATE

Chairman Perkins and members of the Subcommittee on Elementary, Secondary and Vocational Education, thank you for the opportunity to talk with you today about sex equity in vocational education in New York State. My name is Carol Jabonaski and I am the Coordinator of the Occupational Education Civil Rights Coordinating Unit of the New York State Education Department. Before I began in this position in June, 1980, I was the Supervisor of the Occupational Education Special Programs, also known as the Sex Equity Office, in the State Education Department, a position I held for about three and a half years. I have also taught elementary and secondary Home Economics and Health, and taught Hotel Technology at a community college. Through all of these experiences, and especially in the last 5 years that I have been directly involved with sex equity in vocational education, I have developed a deep commitment to creating and ensuring that both girls and boys have equal opportunities in selecting the educational programs and careers of their choice, unrestricted by sex role stereotypes.

I would like to share with you the perspective of New York State on the achievements and problems in the area of sex equity in vocational education. In my testimony, I will briefly review the problems that began to focus attention on sex bias, stereotyping and discrimination in occupational education. I will then discuss the achievements made in my State, according to the mandates of section 104 of the Vocational Education Amendments of 1976. I will conclude with an assessment of the problems that still remain in the development of sex-fair vocational education and offer recommendations for the continuation of sex equity efforts in the reauthorization of the Vocational Education Act.

SECTION I: OVERVIEW OF THE PROBLEM

During the hearings before Congress prior to the enactment of the Education Amendments of 1976, occupational education was described as a perpetuator of sex discrimination, sex bias and sex stereotyping. Occupational education was correctly pictured as reinforcing the socialization process by which women were being channeled into stereotyped, lower paying occupations. Indeed, the statistics clearly depicted situations in which disproportionate numbers of women were confined to low-paying, dead end "female" jobs. The situation has improved somewhat since that time, due to sex equity efforts in occupational education and in other fields. Increasing awareness of women's issues has also been a factor. However, problems still remain:

In 1974, women comprised 46 percent of the labor force and a majority of women over 18 were in the labor market;

In 1981, approximately half of all women are working, and nearly two-thirds of all women in the labor force in 1979 were single, widowed, divorced or separated or had husbands earning less than $10,000;

Approximately 90 percent of all women work outside of the home at some time during their lives and most will go to work because of economic need;

In 1950, 62 percent of all clerical workers and 45 percent of all service workers were women, and in 1979 these percentages had risen to 80 percent and 60 percent, respectively;

In 1939, the median income of a full time female worker was 58 percent of the median income of a full time male worker and in 1977, women were earning, on the average, 59 percent of men's earnings;

Approximately the same ratio of earnings held for the second quarter of 1979;

The average woman worker is as well educated as the average man worker, both having completed a median of 12.6 years of schooling;

Although women (and men) are beginning to move into career areas nontraditional for their sex, the "ghettoization" of "women's work" still exists; (U.S. Department of Labor, Bureau of Labor Statistics)

The same disproportionate patterns are found in occupational education. Both staffing and enrollments were heavily stereotyped. In New York State, male administrators dominated all positions except those typically female areas such as health and home economics. Local directors of occupational education were overwhelmingly male: only one of about 60 positions was held by a woman in New York State in 1977. There are now three women occupational education directors; this is progress, but the ratio is still out of balance. The instructional staff reflected the traditional pattern of male and female jobs. For example, in 1977-78, 98 percent of professional positions in Industrial Arts were held by men and 92 percent of professional positions in Home Economics were held by women. Males dominated, and continue to dominate, at the higher levels of education administration. In 1976, only 15 of 798 school superintendent positions were held by women. In 1980, 20 school superintendents were women. There are still no women and no minorities among the 44 district superintendents in New York State. Student enrollments in occupational education program areas were also heavily stereotyped, with males dominating agriculture, technical, trade and industry, and industrial arts programs and a disproportionate number of females enrolled in business, health and home economics programs.

Sex stereotyped barriers in occupational education also contributed to the generation of a sex biased labor force. Examples of such barriers include:

Single sex occupational education institutions that excluded women by policy and practice;

Course restrictions by sex, usually implied by sex stereotyped course descriptions or brochures;

Use of sex biased and stereotyped guidance and recruitment materials that reflect sex stereotyping in interest measurement or career goal recommendations;

Guidance and counseling practices that channel students into sex stereotyped occupational training;

Discriminatory criteria for selection of students for admission to occupational education programs;

Separate career days or programs for males and females;

Activities such as union apprenticeship training programs limited to members of one sex;

Failure to collect data to identify and remediate discriminatory occupational education programs.

Although much attention and research has focused on the impact of sex discrimination, bias and stereotyping on females, concern also extends to the negative effects of sexism on males. Traditional roles constrict the choices of males as well as females, although the economic penalties of these limited choices have not been as drastic for men as the statistics indicate. Instead, the penalties of the male role tend to be exacted in personal pain. It has been established that the life expectancy of the average male is significantly shorter than the average female life expectancy.

The male stereotype is typified by the expectation that men be and act strong and tough, suppressing their feelings and always being in control of the situation. Men have traditionally been expected by society and by themselves to provide the sole means of support for their families. However, the changing social and economic environment has made many of these assumptions less valid. Men and women are increasingly sharing the family's economic responsibility.

A narrow set of expectations, based on sex, limits the range of choices available to both women and men. One of the primary efforts of sex equity in education is to develop expanding roles for both males and females, freeing people to make life decisions based on individual aptitudes, interests and abilities rather than on the arbitrary determinant of gender. Before such opportunities can be created and made available in education, attitudes and behaviors must be examined and changed. By its very nature, this effort must be long, slow and careful process. Data must be gathered and studies made. Training programs must be designed, developed and implemented on a wide scale. Materials, strategies and skills must be created and utilized. All of these factors, then, contribute to the potential success of educational programs that will be equally available and worthwhile for all students, regardless of their sex.

Although federal laws prohibit occupational education programs from engaging in activities that create barriers to equal access, many problems still exist. Although considerable progress has been made toward informing and assisting local education agencies with regard to sex equity problems and approaches, there is a felt need for the continuation of these efforts. Sex equity efforts involve changing long-held attitudes and habits as well as identifying and removing illegal and restrictive practices and policies. There is a great deal of work yet to be done. The support and leadership of the Federal Government, as expressed through the reauthorization of the Vocational Education Act, is a crucial element in the continuation of planned, coordinated and effective sex equity efforts across the country. Failure to reaffirm a strong commitment to sex equity in occupational education would represent an unthinkable betrayal of our achievements to date and of all the women and girls who are in or will enter the labor market to earn their livings.

SECTION II: NEW YORK STATE SEX EQUITY ACTIVITIES AND ACCOMPLISHMENTS

In response to the mandates of section 104 of the Vocational Education Amendments of 1976, the State Education Department established the Office of Occupational and Continuing Education, Special Programs (Sex Equity Office). Appointments to the New York State Advisory Council on Vocational Education insured that women were adequately represented. Policies and procedures to assure equal access to occupational education programs were included in State plans. Funds for programs for displaced homemakers and for the achievement of sex equity were allocated, as illustrated by the following table:

VEA SEX EQUITY FUNDING

	Fiscal year—				
	1978	1979	1980	1981	1982
Displaced homemakers	81,709	351,859	455,122	295,944	275,000
Research	23,604	65,421	44,914	0	0
Guidance and counseling	111,597	54,647	62,284	0	0
Overcoming sex bias	894,429	640,082	783,358	784,926	450,000
Support services for women	0	0	0	0	75,000
Total	1,161,339	1,162,009	1,395,678	1,130,870	975,000

Highlights of accomplishments from fiscal year 1977 to fiscal year 1981 are summarized below, grouped by major function:

A. Create awareness of programs and activities in vocational education designed to reduce sex bias and sex stereotyping in all vocational education programs

Provided leadership in planning and conducting workshops, seminars and informational meetings; held statewide sex equity seminars for vocational students and educators; made presentations to community organizations and local educational agencies; funded a university 6 credit hour inservice course on sex equity for vocational educators, which trained over 820 vocational educators as change agents for facilitating sex equity who made more than 178,000 contacts with students, teachers, parents, and others relative to sex equity and conducted inservice sex equity workshops, established sex equity resource centers and revised sex-biased curriculum; assisted Cornell University in producing a Youth Group Program activity kit developed by students (distributed over 500 copies) and an audio filmstrip and source book, "Expanding Adolescent Role Expectations," (distributed over 20,000 books and 2,000 filmstrips); a mailing list of over 5,000 has been developed; developed numerous resources to create awareness of sex equity; developed four audiotutorial modules for reducing sex bias; produced "Turning Points," a documentary film depicting the problems and experiences of women pursuing careers; produce "A Man's Place," a documentary film dealing with society's changing masculine role; conducted a student poster contest; prepared and distributed 150,000 copies of the VOICE (Vocational Options in Creating Equality) newsletter; prepared articles for State and National publications; produced seven series of public service announcements for television; distributed over 100,000 copies of the comic book "Super People," designed to develop awareness of sex role stereotyping, to elementary school students. These four years of accomplishments culminated in the New York State Sex Equity Conference held at Grossingers, New York on November 11-13, 1981. This conference was attended by approximately 375 educators and representatives of government, business and industry within and outside New York State. Fifty-three programs on various equity topics were presented. The Conference was cosponsored by the State Education Department, Division of Occupational and Continuing Education and the Consortium for Educational Equity at Rutgers University, and the State University of New York at Oswego.

B. Gather, analyze, and disseminate data on the status of men and women, students, and employees in vocational education programs.

Collected data through the State Education Department's data collection center; worked with other organizational units to identify necessary procedural changes to meet data collection requirements; analyzed collected data and prepared statistical reports.

For 1980-81 secondary occupational education enrollments, only three programs had no cross—sex enrollment (sections of Industrial Technology, Automotive Technology, and Tool and Die Making, each all-male with low enrollments). Although certain occupational education program areas such as Agriculture, Technical, and Trade and Industry are dominated by males, female enrollments have increased 6 percent, 6.1 percent and 4.6 percent respectively since 1976. The following tables illustrate changing enrollment patterns by sex. Table I shows enrollment figures and Table II shows percentages by sex and program area from 1976-77 to 1980-81.

TABLE I.—MALE/FEMALE SECONDARY OCCUPATIONAL EDUCATION ENROLLMENT BY USOE PROGRAM CATEGORY

USOE occupational education program category	Secondary				
	1976-77	1977-78	1978-79	1979-80	1980-81
Male	10,850	11,078	8,446	7,988	6,866
Female	2,621	3,421	2,500	2,577	2,356
Agriculture, total	13,471	14,499	10,946	10,565	9,222
Male	10,010	9,385	8,966	9,511	8,065
Female	11,544	10,692	10,272	11,302	9,803
Distributive education, total	21,554	20,077	19,238	20,813	17,868
Male	971	2,037	1,068	1,463	1,661
Female	12,430	15,991	11,216	11,113	10,925
Health, total	13,401	18,028	12,284	12,576	12,586
Male	1,750	1,488	1,515	1,078	907
Female	7,487	6,196	5,337	4,099	3,030
Home economies, total [1]	9,237	7,684	6,852	5,177	3,937
Male	69,025	72,106	66,849	65,580	58,792
Female	195,986	208,817	192,544	182,672	152,004
Office and business, total	265,011	280,923	259,393	248,252	210,796
Male	10,348	10,420	6,648	7,604	8,358
Female	2,412	2,561	1,341	2,537	2,779
Technical, total	12,760	12,981	7,988	10,141	11,137
Male	80,904	76,761	61,259	61,249	61,543
Female	20,674	20,035	18,384	18,730	20,508
Trade and industry, total	101,578	96,796	79,634	79,979	81,963
Male	183,858	183,275	154,751	154,473	146,104
Female	253,154	267,713	241,594	233,030	201,405
Total, all areas	437,012	450,988	396,345	387,503	347,509

[1] Occupational home economics only

TABLE II.—MALE/FEMALE SECONDARY OCCUPATIONAL EDUCATION ENROLLMENT BY USOE PROGRAM CATEGORY (IN PERCENTAGES)

USOE occupational education program category	1976-77	1977-78	1978-79	1979-80	1980-81	Percent increase in nontraditional enrollment since 1976
Agriculture:						
Male	80.5	76.4	77.1	75.6	74.5	
Female	19.5	23.6	22.9	24.4	25.5	6
District education:						
Male	46.4	46.7	46.6	45.7	45.1	
Female	53.6	53.3	53.4	54.3	54.9	NA
Health:						
Male	7.2	11.3	8.7	11.6	13.2	6
Female	92.8	88.7	91.3	88.4	86.8	
Home economics:[1]						
Male	18.9	19.3	22.1	20.8	23.0	4.1
Female	81.1	80.7	77.9	79.2	77.0	
Office and business:						
Male	26.0	25.6	25.7	26.4	27.9	1.9
Female	74.0	74.4	74.3	73.6	72.1	
Technical:						
Male	81.1	80.2	83.2	75.0	75.0	6.1
Female	18.9	19.8	16.8	26.0	25.0	
Trade and industry:						
Male	79.6	79.3	76.9	76.6	75.0	4.6
Female	20.4	20.7	23.1	23.4	25.0	
Total, all areas:						
Male	42.0	40.6	39.0	39.9	42.0	
Female	58.0	59.4	61.0	60.1	58.0	NA

[1] Occupational home economics only

C. Develop strategies to correct problems of inequity in vocational education programs

Annually, provided technical assistance to local educational agencies (including Boards of Cooperative Educational Services (BOCES), large city school districts, and postsecondary institutions) and to Education Department Bureaus in the development of sex equity actions; collected and analyzed status report on action plans and made recommendations for future action; this year, to date, action plans have been received for review from all 44 BOCES, 15 city school districts and 175 LEAs; 4,000 copies of the planning guide, "Actions For Change" have been disseminated; developed procedures for requesting proposals for grants to overcome sex bias; promoted the appointment of a representative number of women to local advisory councils to gain support and assistance in carrying out sex equity responsibilities; provided sex equity information to the New York State Commissioner of Education Advisory Council on Equal Opportunity for Women; worked with the New York State Department's Internal Task Force on Sex Equity to identify types of staff involvement; developed learning packets from identified needs to provide technical assistance to local educational agencies; developed resources and guidelines to assist local administrators; and funded 115 programs through VEA grants to overcome sex bias.

Funded programs provide development of equity materials and resources; training for students, parents, educators, administrators and business and industry; programs for nontraditional students and other special populations; and efforts to eliminate sex bias, stereotyping and discrimination in vocational education.

D. Review the distribution of grants and contracts by the State Board to assure that interests and needs of women are addressed in all projects assisted under this Act

Developed sex equity criteria, guidelines and procedures to be used in the review of all proposals; provided assistance to supervisory staff in reviewing 3,733 proposals for compliance with sex equity provisions of the Act; conducted a compliance review of a sample of funded programs and made recommendations for follow-up action where necessary.

E. Review all vocational education programs in the State for sex bias

Conducted vocational education program reviews through the assistance of State Education Department Occupational Education Staff in approximately 100 secondary institutions; required local education agencies to submit program self-evaluations to reflect sex equity status.

In addition to efforts to meet the needs of special populations, the Department is carrying out its responsibilities under the federal Office of Civil Rights' (OCR) "Guidelines for Eliminating Discrimination and Denial of Services on the Basis of Race, Color, National Origin, Sex and Handicap in Vocational Education" issued on March 21, 1979.

As required by the OCR Guidelines, New York State has prepared and submitted to Washington the Methods of Administration and Related Procedures for Compliance with the Civil Rights Authorities in Vocational Education (MOA). The MOA describes the compliance program adopted by the New York State Education Department and the procedures to be used in carrying it out.

Standards Governing Civil Rights in Vocational Education Programs were developed by the Department and are used as the criterion upon which an agency's compliance with federal civil rights statutes can be determined. The Standards are organized into six sections: 1) General Provisions, 2) Establishment of Vocational Education Programs and Facilities, 3) Recruitment and Admission, 4) Treatment of Students in Vocational Education Programs, Services, and Activities, 5) Employment, and 6) Age Discrimination.

The following are some of the typical areas where findings of noncompliance related to sex discrimination have beeen cited as a result of on-site reviews:

Sex-sterotyped home school and BOCES recruitment materials (slide presentations, posters, brochures) that: 1) depict male and female students only in traditional program areas; and 2) list course requirements that appear to discriminate against students on the basis of sex, such as "able to safely lift 65 pounds," when such requirements have not been validated as essential to course participation.

Lack of documented efforts to promote nontraditional career opportunities.

Some districts not issuing public announcements of vocational education opportunities offered without regard to sex, race, color, national origin or handicap.

Of those district issuing such announcements, many have not included required information regarding Title IX.

Establishment by some component school districts of attendance and academic criteria for BOCES enrollment, which has potential for excluding females in nontraditionial programs.

Counseling of students, predicting success in home economics and industrial arts and other traditional program areas on the basis of gender.

Use of sex as a selection criterion for entrance into home economics and industrial arts courses.

Some student awards in occupational education program areas exist in which gender is used as a basis for eligibility.

Written agreements for the referral or assignment of students frequently do not include the required assurances from the union, sponsor or employer that students will be treated equally without regard to sex, race, color, national origin, or handicap.

Applications for teaching and non-teaching positions frequently include requests for information regarding the applicant's sex, marital status and physical defects or limitations.

Advertisement of job openings is frequently limited to word-of-mouth, and preference given to residents of the district. These practices tend to perpetuate exclusion of minorities and exclusion of women from administrative positions.

Pregnancy is often treated differently from other temporary disabilities in that women returning from maternity leave in some districts are required to produce a doctor's statement indicating they may return to work. This is not a requirement for other medical leaves of absence.

Discrimination against males exists in some districts where parental leave is allowable for female employees only.

At the postsecondary level the Bureau of Grants Administration reviews all postsecondary institutions for compliance with the U.S. Office for Civil Rights' "Guidelines for Eliminating Discrimination and Denial of Services in Vocational Education on the Basis of Race, Color, National Origin, Sex and Handicap."

F. Monitor the implementation of laws prohibiting sex discrimination in hiring, firing, and promotion procedures relating to vocational education within the State

The Job Network Information Service (JNIS), in operation since 1978, implements a Statewide candidate pool and job information service. JNIS was established in response to the minimal number of women in administrative positions in the educational system of this State. Even though women comprise a substantial portion of the professional staff in education, their numbers are almost absent in school administrative positions.

JNIS affords women an equal opportunity to ascend the career ladder and gain employment in school administration, first, by widely publicizing the location and type of administrative vacancies and, second, by maintaining a resource pool of qualified women administrators. The number of administrative vacancies in public school management advertised by the Network has steadily increased since the Network's establishment. In the Network's first year of operation, 1978, 332 administrative vacancies were advertised. In 1980, 544 administrative vacancies were advertised. Over a two-year period, the number of administrative vacancies advertised by JNIS increased by 64%. To date, 415 administrative vacancies have been advertised for 1981.

The Network's Candidate Pool List publication which is distributed to all Chief School Officers identifies women qualified for employment as administrators and delineates pertinent employment information for women registered with JNIS. Appointment officers thus can contact qualified women to interview for vacant administrative positions. Most importantly, JNIS provides a mechanism to monitor administrative vacancies and hirings. Regionally, twenty-five members of the Commissioner's Statewide Advisory Council on Equal Opportunity for Women monitor the Network. Council members notify JNIS of vacancies which were not previously listed and can confirm appointment information. Statewide, Chief School Officers provide the Network with pertinent information on administrative appointments for positions previously listed in the Network on a voluntary basis. This information includes the name and racial/ethnic identification of the appointee and a breakdown of the number of female and male applicants.

The number of women registered with the Network has steadily increased. In 1979, 241 women were registered. To date, 498 women are registered. The number of women registered with the Network has increased by 88 percent. Various factors contributed to the increase of JNIS, extensive recruiting and promotion efforts to enlist the participation of candidates and administrators by staff members responsible for operating the Network, broader dissemination of Administrative Job Opening Listings and updated JNIS information materials. Presently, the New York City Board of Education participates in the Network and JNIS services are available through all State University of New York and City University of New York Student Placement Centers and Job Information Centers in the New York State Library System.

To guard against unlawful discrimination in employment in the Department's Office of Occupational and Continuing Education, a plan for Equal Access in Employment for Vocational Education was developed and implemented. This plan, distributed to the Office's hiring officials, supplements the Department's Affirmative Action Plan and specifically establishes uniform procedures for revising job descriptions, maintaining a qualified candidate pool, advertising job openings, screening applicants, developing oral examinations, and making permanent, non-competitive or labor class, and provisional appointments. Procedures governing authorization of appointments outline prohibitions against discrimination on the basis of sex, handicap, race, color, or national origin. Appointment monitoring procedures include provisions of assurances of non-discrimination be provided to the appointing authority.

G. Assist local educational agencies and other interested parties in the State in improving vocational education opportunities for women

Established model programs at the adult and postsecondary levels to address the needs of displaced homemakers and other special groups; coordinated the efforts of the Education Department and the Department of Labor to provide total services to participants in model programs; used media—VOICE Newsletter, public service announcements for TV, and the Region II Dissemination Network to publicize opportunities for women in occupational education in local education agencies; provided technical assistance to local education agencies; funded in-service programs for teachers and administrators; and distributed materials on improving services.

A needs assessment for child care services among women in New York State occupational programs was completed in 1980. The research assessed the need for child care services among current and prospective female occupational students, with children, in New York State Boards of Cooperative Educational Services and Community College, determined the extent to which child care needs present a barrier to occupational education program access for these women, investigated the feasibility of providing on-site, or campus, child care services and determined the probable use of on-site services. Over 150 copies of this report were disseminated Statewide.

The need for child care as a support service for adult students has already been recognized by many postsecondary educational institutions. In New York State, a 1978 survey of SUNY Community Colleges revealed that child care services are already provided on close to half of these campuses.

Another significant study was conducted in 1979, contributing to the development of more accurate statistical information on the numbers and needs of displaced homemakers in New York State. The purpose of the project was to provide estimates of the needed base-line data necessary for effective public policy and program planning. The study resulted in a maximum estimate of 683,700 individuals who may now be displaced homemakers and an estimate of 57,470 new displaced homemakers each year.

The study also addressed the priority needs of displaced homemakers: (1) Personnal Adjustment; (2) Career Adjustment; (3) Program Participation; and (4) Support and Follow-up.

The priority given by displaced homemakers to occupational dimensions is clearly identified in this study. Nursing, driving, flight training, sales and advertising, management skills, industrial trade/tech skills, engineering and high school equivalency were the most frequently identified learning interests. The vocational emphasis supports the job-related needs critical to and the greatest priority of, displaced homemakers.

The priority of job and job-training needs of displaced homemakers is emphasized by the participant turnout at a career-information day in western New York State early this year. Over 200 women voluntarily attended this session on a cold, snowy Saturday in January.

Displaced homemaker projects funded in New York State from FY '77-82 were in excess of one million dollars. These projects included the provision of vocational education instruction needed for employment; instruction in seeking employment; placement services; life skills development; visits to work and training sites; access to support networks; counseling; referrals for employment; remedial reading and math classes; development of local school capabilities to serve the needs of displaced homemakers; and career planning.

H. Make available to the general public and to specified States and federal agencies information relating to procedures and plans for overcoming sex bias

Increased public awareness of activities conducted by local educational agencies to promote sex equity; local education agencies include information on sex equity in local public relations materials and releases; prepared newspaper articles on sex equity program activities; reported on sex equity program progress and activities to the Department's Deputy Commissioner for Elementary, Secondary and Continuing Education; announced sex equity program activities to local educational agencies through the Department's School District Administrator's Newsletter; participated in TV and radio interviews on program activities; disseminated over 1100 copies of "Resources for Meeting the Challenge" to local educational agencies; disseminated report on the status of women and men students and employees Statewise; funded the conduct of a longitudinal study of sex equity in postsecondary education.

I. Review self-evaluations required by title IX

Established procedures for reviewing Title IX self-evaluations; reviewed 260 Title IX Self-Evaluations for all agencies requesting VEA funding.

Review and submit recommendations related to overcoming sex bias and sex stereotpying in vocational education programs for the five-year State plan and its annual program prior to their submission to the secretary

Sex Equity Coordinator is a member of the State Plan Planning Committee; has submitted recommendations for improving sex equity provisions in the Plan; developed State Plan objectives regarding eliminating sex bias and sex stereotyping; publicized public hearings for the State Plan input to required recipients through Departmental Statewide mailings and newspaper announcements; and disseminated this information Statewide to women's organizations and equity-concerned community organizations and labor groups.

Summary of problem areas

Although activities to promote sex equity within vocational education have been implemented during the past five years, and although significant progress has been made, common problems in meeting legislative mandates still exist. Patterns that limit and restrict nontraditional choices in educational development are still frequently observed.

Reviews of local education agencies have revealed that there are often gaps and omissions in compliance with provisions of Title IX that promote students, staff and general public awareness of sex equity requirements in education. The lack of administrative support for sex equity issues in vocational education, along with unconcious biased attitudes of administrators, teachers and counselors, constitutes a barrier to sex-fair education and impedes the removal of existing problems. These problems include the use of recruitment and promotional materials that depict students in courses and programs traditional for their gender, the lack of role models among teachers for nontraditional career choices, negative comments and jokes about students based on sex, counseling practices that discourage nontraditional enrollments and the use of biased and stereotyped instructional materials.

The cumulative effect of sex bias, stereotyping and discrimination in vocational education is to reinforce existing social stereotypes that limit the full range of choices and options available to students. With gender as a dividing line, other interests, aptitudes and skills are ignored in favor of an arbitrary determinant. Because the reality of sexism is deeply rooted in this society, efforts to eliminate its effects in education must continue. Our commitment to equal opportunity for students must not waver now.

Recommendations

Vocational education is one link between school and the world of work. Although sex equity concerns are a relatively new aspect of vocation education, efforts made in this area have provided positive benefits for education, business and industry in response to the changing work force and the needs of employers. This section presents recommendations for the reauthorized Vocational Education Amendments. These recommendations flow from the previous sex equity provisions of the 1976 VEA, from studies of the activities and achievements that have resulted, and from the convictions of the New York State Education Department in this area during the past five years. The following elements must be included in the central focus of vocational education in the years to come:

1. the Vocational Education Amendments should continue to promote sex equity in planning, programming and funding;
2. funding and program requirements for sex equity should be integrated into the entire vocational education system for greatest effectiveness;
3. vocational education priorities must include meeting the needs of special groups such as displaced homemakers, pregnant teenagers, single heads of households, the elderly, and men and women entering non-traditional jobs.

With these priorities in place, the achievements made in the past five years will continue. In conclusion, I wish to emphasize that the efforts and commitment made on behalf of sex equity in vocational education truly contribute to a larger concept of equal opportunity and worth for all students. This is the foremost goal of education, the opportunity for each student to develop, grow and achieve to his or her maximum potential. Maintaining the commitment to sex equity in vocational education is integral to the achievement of this goal. Thank you very much.

Mr. MILLER. Thank you very much. Again your written testimony will be put in the record in its entirety. You may proceed in any fashion you desire.

STATEMENT OF CONNIE GIPSON, CONSULTANT, VOCATIONAL EDUCATION, CALIFORNIA STATE DEPARTMENT OF EDUCATION

Ms. GIPSON. Mr. Chairman and members of the subcommittee, thank you for giving me the opportunity to come to you today. I am Connie Gipson, sex equity coordinator from California. I will try to be brief since I do have the written testimony.

You have asked me to tell you what has gone on in our State and what the problems have been, where we are going in the future. We are a very large State in California. We have 350 programs at the secondary level. In comprehensive high school, 76 regional occupational programs, 107 community colleges, 1,046 school districts. In looking at the laws, we have had some problems.

Size was a big thing in our State. So therefore, I come to you today to say that our State was committed. We have a joint policy council formed with members of the board of Governors and the State board of education. They showed their commitment early on by appointing a project to look over the State's efforts to make sure that the sex equity provisions of the act were met.

This project reported directly to them because they felt very stongly that—I should say right off that our State matched the $50,000 and appointed the sex equity coordinator at the State department of education and at the chancellor's office.

We went above and beyond that with funds. Most of our efforts have been jointly funded. We feel that we have done—we have evolved. We have had things in place before the legislation. We started out with Future Farmers of America, getting women in. We had a large number of women going through teacher training in agriculture.

So, some things were already happening. We had already addressed displaced homemakers. That movement started at Mills College. We had women senators going through and they spread all over California. There were some things in place but the legislation provided the impetus that we needed at that particular time. We think our program areas had already started to address the issue.

We had a large number of advocacy groups in California who were there from day 1 waiting to see what the State was going to do in this arena. I am proud to say at this particular time, we have a network of many people, educators, labor, management, community based organizations, all working together to meet the mandates of the act.

Our first State president, is female, from Future Farmers of America. Our director of California directors of vocational education is female. Finally, our new State director of vocational education is female. Our girls have taken the top prizes in competition in all kinds of competition and they are just walking away with that.

Some fellows are unhappy about that. I provided you with enrollment data on our programs. I won't go into that except to say we are proud of the efforts we made. When I hear about agriculture, I already know that over a third of our agriculture students are female. We are looking at the heart of things now like auto mechanics.

We have gone past agriculture production and services. Like the great State of New York, size is a major barrier when it came to our State, so we had to do things on a geographic basis. We provided coordinators in areas. For instance, we have a coordinator that does just Los Angeles city by herself. There were some sleepers in this legislation that I think you ought to be aware of. One was the incentive requirement that was placed in this legislation.

I think that was a very good provision of this legislation. That incentive requirement enabled us to do many things in our State. We were able to set aside $250,000 for campus sex equity coordinators out of that piece of legislation. We funded demonstration sites at the secondary level that developed program strategies. This year, 90 districts instead of the 30 will be developing strategies to address equity. Sex equity was infused into a State to the point where we think it has permeated into our thinking.

Whenever we are about to do anything, we automatically address sex equity. We made a point to increase the number of women who reviewed proposals, received contracts and did all of those kinds of things. We found out we did have a job to do in that arena. One of our major accomplishments I feel was the developing collaborative efforts with other agencies. This was important in California.

We had a lot of community based organizations that frankly were really doing a good job in job development and placement for nontraditional. We funded them out of vocational education funds initially. They taught us some things. They taught us how to do job development and placement. They used our services as well. So we did some linkages with community based organizations.

Most of them ended up with partly funded by vocational education and partly funded by CETA. Unfortunately their CETA funding has been cut and many of them are now out of existence, which we are now having to pick the ball up. Everybody is looking to vocational education to pick up the ball because many of the organizations that we had that were serving the people are gone.

We have done some things with our CETA prime sponsors and their staffs in teaching them to do nontraditional because there was some help that they needed there. We have had unparalleled support from labor and management in our State. In our series the sex equity in apprenticeship, we had over 75 firms and 30 unions working with us.

Our chair for that, that series is cochaired by two men from operating and engineers' local No. 3. They have been very supportive with us. They have just garnered all kinds of labor support to the point I have got to go back tomorrow to meet the sheetmetal and plumbers because we are doing some things with them tomorrow.

These slide tape shows are about apprenticeship, not sex equity. We started out thinking women did not know anything about apprenticeship. We found out the men didn't, either. So that has been a real good plus for vocational education. It came about through sex equity. The equity information on apprenticeship just was not there.

We have had major support from our governmental institutions. We are working with a department of corrections, the division of apprenticeship standards, the CYA, the California Youth Authority, because we brought information on nontraditional to inmates in our penal institutions.

We found there were some people who still thought that women inmates should be trained to be housewives. That was appalling to me. The data collection caused us to look at our students. We had some idea that our students all-still looked like Dick and Jane in the first reader.

We took a look and they didn't. We had teenage parents, women in continuation schools, we had all kinds of different people. So we used another sleeper in the legislation that we think was really critical and that is the support services for women section in the legislation. We gave $50,000 grants to the large urban districts, Los Angeles Unified, Oakland, San Diego and Sacramento got large grants in support services for women.

Those have been some of our big winners because they provide women with information that they need. The employers are already built in. The math teachers and the science teachers have to work with the vocational educators. We have through that little grant, PE teachers who are identifying girls to go into vocational education. We have been overwhelmed with success in those. Eighty-six girls in one Oakland high school signed up in 1 day. Now we have 300 girls in Oakland trying to get into that project.

I think it is because they realize that they have got to do something in the world of work. It is heartbreaking in a sense that those projects have been successful because we perceived that the need was always there. I want to tell you nicely, those projects have been refunded. Those projects have to serve adult women and girls in high school.

We have had women who are welfare women who came into them who are receiving $20 an hour. They are just overwhelmed with that. We are moving now to the point where we have county welfare directors identifying women to go to our displaced homemaker programs and get vocational training. We are getting that together where EDV, the county welfare workers and our education are jointly together to do that.

So I think things are moving in California.

You have asked me to point out where the problems are and what portions of the act should be revised. We have had problems because the legislation is not clear on where we can recruit. Let's face it. Displaced homemakers are not going to leave Days of Our Lives and drive to the community college and park their car, come in and enroll in a vocational program.

We have some people who think they have to be in the program before vocational education can serve them. That has been a real problem. I think that we would like to have the support services portions of the act revised so we can include men. We feel very strongly we have got a job to do with the men in our State.

They need help. Our data show that the men need help. Health care in particular is critical. We need the legislation permissive so we can address men who go into health care. It is a very big problem. We have men who are single parents in California.

One of our disc jockeys heard one of our displaced homemaker programs advertised and he said hey, we need that, too, men. Men stopped their cars, got off the freeways and called. Now we have men's groups talking about they need help being single parents. We have taken a look at business and industry and found we have a job to do in California.

We have a high technology and we find we are going to have to address that. This year, we are bringing in 100 business leaders to tell us what to do about our students because there is a gap between what students want to do and what business and industry needs in California. We are going to work with that.

In closing, I think what I mean to say and really want to say to you strongly, we are committed in California and we want to keep on doing that. We are committed to competence. We have a network in California and it includes blacks, whites, females, you name it, Hispanics. Even in our State, we know we have got a job to do. We have not gone to address the needs of rural and minority women yet.

We have a big job to do in that arena. We would like the legislation to continue. We think with your help, we will do it. Thank you.

[The prepared statement of Constance Gipson follows:]

PREPARED STATEMENT OF CONSTANCE F. GIPSON, CONSULTANT, VOCATIONAL EDUCATION, CALIFORNIA STATE DEPARTMENT OF EDUCATION

I have been requested to give you a brief assessment of what has happened in California since the passage of the legislation, what the positive outcomes have been, where the problems have occurred, what revisions in the legislation we would like to see, and what we plan to do in the future. First, I will give you some background and an assessment of what has happened since 1976.

Our vocational education delivery system is composed of secondary vocational education programs, found in over 350 secondary districts and 76 regional occupation programs or centers, under the governance of the State Department of Education, and postsecondary education at 107 community colleges, under the governance of the Board of Governors. The two boards work cooperatively under a joint policy council which was formerly called the Joint Committee on Vocational Education. In 1977, as evidence of their commitment, the joint committee funded an external project, reporting to them, to monitor the State's efforts in meeting the sex equity mandates of the act.

California matched the $50,000 set-aside and has funded another full-time coordinator for sex equity in vocational education at the chancellor's office, California community colleges. A significant percentage of all sex equity projects have been jointly funded.

The movement toward sex equity in California began before the 1976 legislation. Females had been admitted to Future Farmers of America and women were going through the teacher training institutions majoring in agriculture. Business education was cognizant of the upsurge in opportunities for women in the business world. Consumer and home economics education had developed curriculum on sex equity. The first reentry program for women had started and spread throughout California, and women's centers were established on many campuses.

Outside public education the first displaced homemaker program had been established at Mills College. California was the first State to have goals and timetables for women as well as minorities in apprenticeship, and we had advocacy groups who were pushing equity in many areas.

At the State level, the provisions of Public Law 94-482 were viewed initially with concern. Faced with declining enrollments, we wondered how a new thrust would be viewed by local school districts and many felt our best posture would be to maintain quality programs without worrying about the composition of those programs. We were pleasantly surprised to find that many local districts were already addressing the issue. Today, we have a network composed of persons from education, community-based organizations, governmental agencies, business, and labor who have moved through the stages of change—from not being aware of the problem to acceptance of the problem, to taking action to eliminate the problem, to creatively thinking of ways to overcome sex bias. Districts have reviewed materials for bias, identified barriers to equal access and have employed various strategies to recruit students into nontraditional classes.

Females have taken the top local and state prizes in vocational industrial clubs of America competition and our State president of Future Farmers of America is female.

We have our first female State consultant in agriculture. The president of California directors of vocational education and our new State director of vocational education are female.

I have provided you with enrollment data on our programs in the written portions of this testimony. We are proud of our record but feel it could not have been accomplished without the legislation.

The size of the State was a major barrier in addressing the 10 mandated functions of the coordinator. The two sex equity coordinators are managers of projects that provide for the services that are mandated, rather than performing the required duties themselves.

We began our implementation phase with a project that provided inservice training for one male and one female from every high school and community college in the State. This project utilized 12 secondary consultants and 7 postsecondary consultants who were assigned on a geographic basis. An additional seven geographic consultants provided technical assistance to each community college.

The incentive requirement of the act was utilized for the next phases of implementation. Thirty secondary districts received funds to develop equity strategies for each program area. Each community college received funds to implement equity and were asked to appoint a campus sex equity coordinator.

Sex equity was infused into our regular ongoing systems for applications monitoring compliance, and evaluation. We made a conscious effort to increase the number of women who participated on advisory committees and on the State planning committee, reviewed proposals and received contracts.

In sex equity we assisted vocational education in developing collaborative efforts with other agencies and organizations.

We funded community based organizations to provide support services for women and displaced homemakers. These are two distinct populations with little overlap. Community-based organizations have provided secondary and postsecondary students, teachers, counselors, and administrators with information on our industries. We have learned job development and placement from them and they have used our resources.

Sex equity geographic consultants have provided inservice training on job development and placement not only for educators but for CETA prime sponsors, their staffs, and Government officials.

We have had unparalleled support from labor and management in our State. Over 75 firms and 30 unions helped to develop one of our major projects, "The Sex Equity in Apprenticeship Series." These slide tape shows are about apprenticeship, not sex equity, and use real apprentices and journey-level workers, with the composite truly representative of California's work force. While developing components of the series, members of statewide joint apprenticeship committees work side by side with sex equity personnel.

The purpose of the series was to bring accurate information on apprenticeship to students, males as well as females, counselors, teachers, and administrators who we found did not know any more about apprenticeship than female students did.

The development of this series has led to many positive outcomes. The advisory committee for sex equity in apprenticeship is cochaired by two officials from Operating Engineers Local No. 3. Last year, Local 3 disseminated notices of its examination to the local sex equity coordinators.

We have had major support from the governmental agencies, from the Women's Bureau and the Division of Apprenticeship Standards to the California youth authority and the Department of Corrections where we are introducing nontraditional careers, with success, to inmates in our penal institutions.

The data collection and analysis required by the legislation caused us to take a fresh look at our students who no longer all look like Dick and Jane. We gave $50,000 grants to four large urban districts to provide support services for women in nontraditional programs.

The projects serve junior and senior high school women, women in continuation schools, teenage parents, and adults. For many, this will be the last time they will be served by an educational institution. They have received counseling, training, and placement in nontraditional fields that are well-paying. Originally designed to serve 150 girls at each site during the recruitment phase, they now have more applicants than they can handle. Eighty-six girls from one Oakland High School signed up in 1 day. Adult women have received jobs paying up to $20 an hour. They have become electronic technicians computer programmers, machinists, and emergency medical technicians. Pacific Telephone is now asking L.A. Unified to start a program for women to become installers and technicians.

You have asked me to point out problems and areas of the legislation that should be revised. We urge that the legislation be revised to clarify which portions of the act may be used for fiscal incentives. We urge that portions of the regulations pertaining to support services and displaced homemakers be clarified to show permission to use funds to recruit those populations. We still have people who feel displaced homemakers and persons seeking non-traditional programs must enroll in vocational education before vocational education can serve them. We urge that the support services for women in nontraditional occupations be revised to include men as well.

Where are we now and what do we plan for the future?

We have taken a new look at business and industry and found we have a major job to do to prepare students for employment. If we are to succeed, there must be a match between what industry needs, what education is preparing students for, and what students want to do. California's industries are becoming more and more high technology industries where the demand for workers is in such fields as electronics, computer programming and operation, machining, and machine repair. Our industries more and more require workers with a strong background in reading, mathematics, science, and mechanical ability. According to 1980–81 figures, 57 percent of our males and 38 percent of our females take 4 or more years of mathematics. Fifteen percent of our males and 7 percent of our females take 3 or more years of high school physical science. The number of industrial education courses offered has declined at a significant rate due to budget cuts.

Do students want to do the occupations that industry needs and are they familiar with these occupations? The most popular career choices in a survey of 9th and 11th grade students in Fremont, Palo Alto, Los Altos, and Mountain View Districts, which are surrounded by technological industries, were performing artist, doctor, pilot, lawyer, and professional athlete.

Students are still told in many ways that they should get a 4-year degree to be valuable and if they can't achieve that, they should try the next level down, and if they can't achieve that, they can become a machinist, or a tool and dye operator. Perhaps what the average American worker does seems to be of little value to our students.

Even advocates who are urging females to take mathematics and science classes are more familiar with the lack of these courses as they relate to occupations such as engineering, but seem to be less knowledgeable about the effect on technical careers.

At the same time, competition seems to have become keener in the employment field. I have met a millwright apprentice who had a master's degree in ancient Greek from Duke and a female with a physics degree who wanted to get into the surveyor's apprenticeship program. The people who ranked in the top 20 on the carpenter's list in Fresno could have made it into any corporate training program.

We want to continue to show through media, posters, and brochures that it is all right to be the average American worker.

In the fall, 100 business leaders will attend a conference sponsored by sex equity and will give us an assessment of what they feel we should do doing to train tomorrow's workers. We plan to assess and meet the needs of rural and minority women since we have a large percentage of both populations. We would like to retrain female teachers to become industrial arts teachers since there is a shortage in this area. This action may help districts who are being forced to lay off good teachers. We would like to pay more attention to the recruitment of males into the health occupations since the shortage of health workers has become critical in California. Due to the assessment of displaced homemakers, we now know that in 1980, there were 580,000 displaced homemakers in California and since the McCarty decision, the number has significantly increased due to the large number of ex-military wives that we have in our State. We expect to play a bigger role in providing services in this area since cuts in CETA funding have driven many organizations that serve women out of existence.

In California, we are committed to competence. We believe that our students should know that employees have to make money for their employers and that the person who does that best is going to get the job.

We are also committed to equal opportunity not only for women and minorities, but for the white disadvantaged who feel they must choose a career in line with their class. We are equally committed to white students who are not disadvantaged and not handicapped and we are proud of the large number of white males in our State who are fighting for equal opportunity for all. People tend to do best what they want to do. If we are to succeed in increasing our productivity as a Nation, we must assure that all people who have the possibility of being good workers have the chance to succeed in their chosen field.

We feel strongly that our results could not have been accomplished without the provisions of Public Law 94–482. We are prepared to continue making progress, but we need to know through legislation that the preparation of males and females in becoming skilled workers is a national priority. With supportive legislation from you, we feel we can make a significant contribution to the increased productivity of our Nation as we move into the 20th century.

ENROLLMENT DATA ON SELECTED SECONDARY PROGRAMS 1979-80

		Total	Female	Percentage
01.0100	Agriculture production	7,515	2,766	36.8
01.0200	Agriculture supplies/services	939	409	43.6
01.0300	Agriculture mechanics	5,234	374	7.15
01.0500	Horticulture	7,687	2,996	39.0
01.0700	Forestry	976	283	30.0
01.9900	Other agriculture	1,096	646	58.9
14.0100	Accounting and computing occupations	16,171	11,584	71.6
14.0201	Computer and console operators	1,895	1,360	71.8
14.0203	Programmers	391	172	44.0
17.0301	Body and fender repair	3,918	80	2.0
17.0303	Auto mechanics	18,574	936	5.0
17.1500	Electronics occupations	6,841	854	12.5
17.2306	Welding and cutting	3,424	89	2.6
17.2801	Fire training	560	76	13.6
17.2802	Law enforcement training	1,168	466	40.0
17.2900	Quality food occupations	3,025	1,505	49.8

ENROLLMENT DATA ON SELECTED SECONDARY PROGRAMS 1979-80

		Total	Males	Percentage
04.0600	Food distribution	1,467	546	37.2
04.1100	Hotel and lodging	505	237	46.9
04.0800	General merchandise	15,199	4,227	27.8
04.0180	Recreation and tourism	429	125	29.1
07.1161	Dental assisting	1,084	83	7.7
07.0203	Medical laboratory assisting	224	90	40.2
07.0303	Nursing assistance	4,738	459	9.7
09.0201	Care and guidance of children	7,099	447	6.3
09.0203	Food management, production and services	3,531	1,510	42.8
09.0205	Institutional and home management and supporting services	535	140	26.2
14.0700	Stenographic, secretarial and related occupations	25,190	2,154	8.6
17.2602	Cosmetology	5,530	185	3.3

CHANGES IN POSTSECONDARY ENROLLMENTS

[Percent male]

	1977-78	1978-79
Agriculture mechanics	95	85
Power and machine	85	72
Forests	83	65
Health occupations education	2	13
Dental assisting	4	12
Nursing, other	17	28
Typist	9	15
Information, communications	18	24
Technical education	85	76
Engineering related	84	73
Civil technology	90	85
Industrial technology	93	83
Forestry	82	74
Roofing	100	95
Maritime occupations	94	89
Small engine repair	95	90

CHANGES IN POSTSECONDARY ENROLLMENTS—Continued

[Percent male]

	1977-78	1978-79
Milling/cabinet work	90	75

Source: Carvell Education Management Planning "Year End Report on the Third-Party Evaluation of the Sex Equity Activities Undertaken By the State in Vocational Education 1979-80".

STAFFING PATTERNS IN VOCATIONAL EDUCATION PROGRAMS 1978-79

	Total	Female	Percentage of change from 1977-78 to 1978-79
Instruction:			
Agriculture	799	81	+35.0
Distributive education	515	232	+6.4
Technical education	24	1	+100.0
Trade and industry	3,370	332	+25.3
Industrial arts	1,984	51	+142.9

Source: EDVE DPAB/VED 716.

	Total	Male	Percentage of change from 1977-78
Health	517	47	−17.5
Occupational home economics	366	24	+27.3
Consumer and home economics	2,049	42	+35.4
Office education	4,058	1,651	+90.0

Source: EDVE DPAB/VED 716.

	Total	Female	Percentage of change from 1977-78
Administration:			
Local administration/supervision	637	124	+66.8
Local program/supervision	3,106	1,796	+15.8

Source: EDVE DPAB/VED 716.

STATEMENT OF NANCY SMITH EVANS, SUPERVISOR, SEX EQUITY DIVISION OF VOCATIONAL EDUCATION, OHIO STATE DEPARTMENT OF EDUCATION, REPRESENTING AMERICAN VOCATIONAL ASSOCIATION, ACCOMPANIED BY EUGENE LEHRMANN, PAST PRESIDENT, AMERICAN VOCATIONAL ASSOCIATION

Ms. EVANS. Good morning. Thank you for the opportunity to testify. I am Nancy Evans with Sex Equity, supervisor with the State of Ohio. I am representing the American Vocational Association today.

I have with me Dr. Eugene Lehrmann, past president of the association, who will be available for any questions you may have later. Although my colleagues at the table have talked about many of the successes and accomplishments we have been working on through the education amendments of 1976, I can reiterate that we have begun to make changes in vocational education through curriculum, through policies and procedures, through creating awareness as Dr. Henry David mentioned and also, we have begun to develop some new creativeness in terms of truly serving both business and industry and the special populations we have within each of our States.

In the interest of time, I will skip through some of these things that they have so ably mentioned. But I'd like to indicate that the cost effectiveness of this kind of expenditure has been truly an accountable one. The ticket price, if we were to look at 50 percent State and the District of Columbia, in 1979, the Federal vocational education expenditures, that only amounted to 0.5 percent of expenditures for sex equity. As you can imagine, if you look through the paper that we have provided for you, each of the States has been very creative in utilizing that to expand services. I'd like to move immediately to some of those things that we have for recommendation from the association.

First of all, we strongly recommend continued assurance of equal access to programs of vocational education by all individuals, especially those who have not always been afforded the opportunity, due to traditional conditioning. Right now, in each of our States, we are facing just like on the Federal level, shrinking resources, deregulation and, of course, those of us in differing agencies are really being hit by political buckpassing, of who is going to be responsible for what kinds of services. Americans need bootstraps and we need your type of assurance that more Americans can continue to have more access to vocational programs from which they can benefit.

The association also strongly recommends the maintenance of the full-time personnel, the mandated functions and the $50,000 set-aside. Over a year ago when we started to collect the information in the paper that we have provided, we were very impressed by how the congressional committee was so forward thinking in what they were doing. However, as the economics of today are starting to hit, it is quite obvious that we haven't even begun to hit the tip of the iceberg with the many situations that are involved. Maintaining the full-time personnel, for this kind of focus, may alleviate some of the current problems that we are facing in meeting these special populations and also may alleviate some financial curves that we are headed for in the next 2 years. In light of the economic status of many of our State boards, it is critical that we have this kind of Federal mandate in order for State agencies to be allowed to continue many of the services that you have already initiated under the 1976 amendments.

We'd also like to recommend State and local planning processes that need to indicate how Federal dollars will be directed at meeting Federal objectives, including those of sex equity. It is not only equitable processes that we'd like to recommend, but it would also help to create awareness at the grassroots level and allow for more self-evaluation and improvement from the local level.

We'd like to recommend Federal funding be used to improve the quality of existing programs. This is especially crucial in those areas where women are traditionally going into traditional programs. As more and more women enter the programs, as the data shows, they are going into traditional female programs which are often low paying, dead end jobs. It is clear those jobs are necessary in our society. But it is extremely critical that the curriculum in those programs be updated so that the products coming off those programs are really more prepared to meet the competitive work force and can really start to ask for salaries which can help to maintain families.

We'd also like to recommend that funding continue to be needed to develop programs in the new high technical programs such as Connie talked about. These are extremely important. Those of us concerned with sexual stereotyping know that these are emerging occupations and have not been sexually stereotyped and yet do allow for flow of special populations into those.

We'd like to recommend also to establish a youth emphasis board to include the concepts of sex equity, to develop the skills, knowledge, and attitudes necessary for successful participation in the private employment sector. This should include prevocational counseling, also. Many students don't even know what's involved in vocational opportunities. We do need that prevocational counseling to include an emphasis in nontraditional opportunities as well as those which are traditional.

We also recommend a provision for a transitional base for women who are reentering the labor market to adjust to the job availability of the private sector. We desperately need the continuance of concerns for the displaced homemaker. While not all women are classified as displaced homemakers, which was a misnomer in some States, the needs of women are unique, especially in the reentry area. From an educational view, we feel that we can create the most emphasis on working with the adults in this area.

Those individuals who are out of school with families often have the highest amount of motivation. They have experience, they have maturity, and they have a sense of responsibility which help to make them very productive individuals, once in the work force. From a Government perspective, this is an obviously better alternative, cost-effective alternative, to that of those same individuals who may have to turn to Government subsidies for existence.

We'd also recommend the need to provide for research and development to help create a means whereby vocational educational programs might be recommended to address the quality of opportunity goals of the Nation. Educators, for the most part, are very well-intentioned individuals, but we need continual help in knowing what directions to go and how we can improve ourselves.

We recommend to provide funding for consumer and homemaking education programs to increase outreach and instructional efforts which enable both men and women to be self-sufficient as they pursue the responsibility of maintaining a home.

We are hoping that as we seek to relieve tension and increased productivity in the work force, that we can also do that within the homefront. In many testimonies there has been a conflict of excellent versus equity. Although key words within our States and within our locals have been excellence, productivity, I'd like to suggest that equity is the tool to reaching those types of elements, rather than a part to be competitive with.

The American Vocational Association suggests that we need to continue the efforts within the sex equity elements and to increase options for considered choices.

[The prepared statement of Nancy Evans follows:]

PREPARED STATEMENT OF NANCY E. SMITH EVANS, SEX EQUITY SUPERVISOR, DIVISION OF VOCATIONAL EDUCATION, OHIO DEPARTMENT OF EDUCATION, COLUMBUS, OHIO, ON BEHALF OF THE AMERICAN VOCATIONAL ASSOCIATION, ARLINGTON, VA.

Reauthorized Legislation for Vocational Education Should:

1. Assure equal access to programs of vocational education by all individuals, especially those who have not always been afforded the opportunity due to traditional conditioning.

2. Fund state boards of vocational education to assign full time personnel to provide leadership in achieving equality of opportunity for men and women through vocational education. A minimum of $50,000 per state should be allocated to carry out functions called for in federal legislation.

3. Call for state and local planning processes that indicate how the federal dollar will be directed at meeting federal objectives, including those of sex equity.

4. Require federal funding be used to improve the quality of existing programs and to develop programs in the new high technology occupations which could enroll more women.

5. Establish a youth emphasis which will develop the skills, knowledge and attitudes necessary for successful participation in the private employment sector.

6. Provide for a transitional base for women who are re-entering the labor market to adjust to the job availability of the private sector including programs for the displaced homemaker.

7. Provide for research and development to help create a means whereby vocational education programs might be reformed to address the equality of opportunity goals of the nation.

8. Provide funding for consumer and homemaking education programs to increase outreach and instructional efforts which enable men and women to be self sufficient as they pursue the responsibility of maintaining a home.

In summary, any new reauthorizing legislation should provide resources to enable vocational education to offer all individuals equal opportunity to understand, to consider, to choose and to pursue traditional and non-traditional occupational programs. Resources must be sufficient to provide the extra services which enable individuals to succeed. This includes outreach, assessment, related basic skills training, counseling and extra time in instructional programs. Vocational education can then be held accountable for the quality of effort extended to assure all individuals equal access and equal success in its programs.

I would like to thank the Chairman and members of the committee for this opportunity to testify on behalf of vocational education in general, and more specifically on sex equity in vocational education programs and activities. In a federal level climate of deregulation and limited funds, this committee faces difficult choices in how to direct the fulfillment of the vocational education mission.

As a representative of the vocational education community, I strongly recommend that there is no more appropriate role for federal government than that of continuing to assure equal access to vocational programs for those groups of Americans who have previously been denied the opportunities to develop employment and life skills necessary for adult survival. In Public Law 94-482, the legislature took an unprecedented leadership role by requiring vocational programs to take actions in overcoming sex bias, sex stereotyping, and sex discrimination. The requirement of a full-time personnel, the tasks of the nine functions, and the $50,000 set-aside provided one of the most cost-effective, accountable frameworks for implementing the democratic ideal of equity. In a time of uncertainty over funding of governmental subsidies and inflationary crises faced by families, the federal emphasis on sex equity has opened up new channels to an employability program which is a cost-effective investment in people and an attractive alternative to other forms of public assistance.

The leadership and influence of state agency full-time personnel have caused the issue of equal access to move from an American ideal to the edges of reality. Sex equity coordinators are providing technical assistance, resource materials, and incentives to motivate and direct the necessary changes. Special projects and products are serving as model programs to provide vehicles for equal access of both sexes to all vocational programs and activities. Although each state has a different annual program of work, state reports indicate similar sex equity activities and trends in results.

As reported by Henry David, director of the N.I.E. legislatively mandated vocational education study, "The Vocational Education Study: The Final Report" (September, 1981), the coordinators' efforts have been most prevalent in state and local "consciousness-raising" programs for vocational administrators and teachers. The focus and design of these programs have shown a steady change, reflecting the maturity and integration of the issue into a comprehensible framework for action. Many coordinators developed their initial activities around the regulation requirement "creating awareness." The first stage of activities, in most states, centered about helping vocational personnel to identify sexist barriers that prevent students from entering vocational programs. This state also established a knowledge base about the resulting political, economic, and social implications resulting from sexism. A great amount of time, energy and resources was expended in this stage in order to alleviate the emotional strain associated with the introduction of a radical change in vocational education traditional sex-role expectations.

The second stage of awareness centered about the development of an updated vocational education image. This emerging image highlights the mission of preparing students for the competitive 1980's job market and also includes the adjunct role of preparing students to be homemakers. The image promotes vocational education as a viable career preparation choice for more individuals, especially those persons who may benefit from occupational preparation that is nontraditional for members of their sex.

Behavioral changes of educators was the target of the third awareness stage. In an effort to meet the Congressional intent of the Education Amendments of 1976, Title II, actions were taken to eliminate the overtly discriminatory aspects of the vocational programs such as written policies and procedures limiting course enrollements to one sex. Model programs also were initiated to develop effective recruitment and retention strategies for nontradtional programs. These models were designed to remediate the years of sex-role conditioning encountered by women and men in career planning and to aid in the crisis-laden transitions required in changing to a different occupation. And finally, activities of this stage have dealt with the more subtle biases of both educators and prospective students. The cultural subtleties, reinforced by social environment, have helped to maintain the sexist decisions and expectations of teachers, students, parents and employers.

A very few coordinators, strengthened by additional financial and state agency support, have begun to touch upon the fourth stage of awareness. This stage includes a critical analysis of the business and industrial, societal and economic forces which control the occupational preparation needs of the pre-1990 work force. The employment market is moving from production of goods to production of services, and from managing resources to managing information systems. Vocational education must provide for the pre-1990 work force training for women and men to assure that—

Skilled workers will be available in industries and job categories where shortages are predicted;

Worker productivity will increase as the skills of men and women are matched with available jobs, thereby increasing job satisfaction;

Industry in low employment areas is encouraged by ensuring a skilled and diverse work force;

Welfare dependency is reduced and tax revenues are increased through lowering unemployment and under-employment rates;

Economic strain within the family is minimized, increasing the value, respect and dignity of all women and men in the family who are in the work force;

Vocational education programs meet emerging occupational demands;

Vocational education curricula are revised to challenge and eliminate obsolete assumptions and teaching methods;

Declining enrollments are increased by recruiting nontraditional students;

The achievements of vocational education students are publicized.

Vocational personnel working toward sex equity have accomplished and continue to—

Promote institutional policies that encourage females and males to acquire skills in nontraditional areas;

Provide outreach programs to recruit and counsel males, females to enter nontraditional areas;

Provide appropriate programs for target groups such as displaced homemakers, single heads of households, pregnant teenagers and the elderly;

Provide staff development activities, such as inservice workshops and conferences, so that administrators, counselors and teachers can meet the needs of students in nontraditional programs;

Provide necessary retraining for vocational education staff so they can provide role models in occupations nontraditional to their sex;

Provide resources, such as model programs, non-sexist curricula, non-biased career counseling techniques, and recruitment procedures targeted for special groups;

Provide increased communication and cooperation among educational agencies, business, labor unions and community agencies;

Increase the awareness of educators and the community of the opportunities offered by vocational education.

INCREASED ENROLLMENTS IN NONTRADITIONAL PROGRAMS

In the five years since the passage of the Vocational Education Amendments of 1976, efforts to expand the roles of men and women in vocational education have brought about many changes, including increased enrollments in nontraditional programs. The following chart shows a three-year increase in female and male enrollments in occupational areas that have been traditionally for one gender:

FEMALE AND MALE SECONDARY AND POSTSECONDARY ENROLLMENTS IN NONTRADITIONAL PROGRAMS

[in percent]

	1977	1978	1979
Female program:			
Agriculture	14.9	17.3	19.4
Distributive education	49.7	51.4	54.0
Technical	17.0	17.6	19.8
Trades and industry	14.4	15.4	17.5
Male program:			
Consumer and homemaking	18.4	19.8	21.5
Occupational home economics	16.1	17.6	18.3
Office	24.6	24.4	27.0
Health	21.8	22.1	16.1

Source: U.S. Department of Education, Office of Vocational and Adult Education, and the National Center on Education Statistics.

Progress has resulted from VEA funded programs and the active role assumed by state sex equity coordinators. In addition to increased nontraditional enrollments, achievements include:

Better enrollment and staffing data being reported to the U.S. Department of Education;

Development and sharing of model sex equity programs;

Changing attitudes among educators regarding male and female roles;

Sex equity efforts developing from an awareness level to an action level;

Sex equity efforts reaching more educators, students, employers and community groups;

Labor unions offering apprenticeships to women;

Increase in the number of females in vocational education administration;

Students and workers in nontraditional areas developing support systems;

Ability and skills, rather than gender, emphasized in vocational education programs;

More states requiring proof of sex equity competency for teaching and counseling certification in vocational education;

Development of program areas combining skills from diverse courses, such as Consumer-Homemaking and Industrial Arts;

Training provided, in some schools, for women in nontraditional occupations where physical endurance is needed;

More women being trained in math, science, and technical skills;

Increasing coordination between vocational education agencies and business and industry in planning for nontraditional workers;

More life skills and experiences being transferred for credits in vocational education programs and for pay in the work force;

More men and women working cooperatively, in and out of the home;

Standards for measuring progress in sex equity being established.

Continued expansion of sex equity efforts must be an ongoing process. Although men and women are beginning to enjoy chosen roles and occupations, one-gender domination of certain areas still exists. For example, the following chart shows that vocational education staffing profiles remain fairly traditional in specific programs:

INSTRUCTIONAL STAFF PROFILES IN VOCATIONAL EDUCATION PROGRAMS [1]

[In percent]

Program	Female staff	Male staff
Health	95.5	4.5
Home economics	88.7	11.3
Business and office	69.8	30.2
Distributive education	25.4	14.6
Agriculture	12.3	87.7
Trade and industrial	5.5	94.5
Technical occupations	4.5	95.5

[1] Vocational Education Equity Study, The American Institute for Research, April 1979 (staffing profiles for 1978).

The chart indicates that more than 80 percent of one gender dominates the fields of Agriculture, Technical Occupations, Trade and Industry, Home Economics and Health. At the State level, white males dominate in all areas except Home Economics and Health. At the district level, 90 percent of directors of vocational education and 59 percent of the counselors are male. (Successful activities of each state are listed in Appendix A.)

NEED FOR CHANGE

With increased participation of women in the paid work force, the relationships among the individual worker, the family and the employer must be re-examined. The large number of women in the paid work force has emphasized the need to be concerned with equal opportunity for all workers. Vocational education provides opportunities for increased participation of women and men in fields traditionally acceptable for only one sex. The issues of unemployment and underemployment, displacement of workers, shortage of skilled workers, job dissatisfaction, occupational segregation, lower wages for women, poor productivity, harassment in the work place, and treatment of aging workers are addressed by sex equity efforts in vocational education.

THE FAMILY

The average American family is no longer the traditional nuclear family composed of a working father, full-time homemaker mother, and two children. Only one in seven families conforms to this profile. In six out of ten families, both husband and wife work. In 1978, one in seven families had a female head of household as its sole support. Almost 50 percent of all married women work; 63 percent of all single women, and 43 percent of divorced and widowed women work. Fifty-three percent of all mothers with children under 18 years old were in the labor force in 1978.

Disadvantaged families have encountered especially intense pressures during this same period of family role changes. Special efforts by vocational educators in nontraditional recruitment have resulted in vocational programs being the "bootstrap" for people on government subsidies who want to become self-supporting. Laurie Sabin, recent graduate of the electronics program, Morehead Area Vocational-Technical Institute, Minnesota, explains: I have just graduated from Morehead AVTI's two-year electronic program. As you know, this is a nontraditional program. I was the only female student in my class. I am a single on A.F.D.C. Before school I was working at a dead-end job with no marketable skills. Wanting to improve my chances of becoming self-supporting, I contacted WIN and they funded me totally the first year and partially the second year. Everyone was supportive to me: my friends, my family. The guys in my class seemed to have accepted me even though we did not share many interests. I noticed no rejection of me by the staff. They were all quite friendly. During the last part of my second year, I noticed a large push in making people aware of students in nontraditional fields. I wish that had started back in the first year. I would like to have gotten together with more women in the same program. I would have liked to have seen a day-care center near the school that had the hours similar to the school.

Changes in the traditional household have changed the needs of workers. The need for better child care facilities, both at work and outside, has increased as women go to work. Displaced homemakers, single heads of households and teenage mothers cannot work at all if child care facilities are unavailable to them. The final report of a successful outreach program designed to assist women in finding and succeeding in nontraditional employment in Akron, Ohio, states: Nearly halfway through the program, we learned a basic lesson: child care is essential. Without extended families or money for baby sitters, many of our clients were simply unable to attend sessions. Child care was a key factor, and when it was provided, our program became phenomenally successful. We tried to arrange in-home child care if absolutely necessary, or at the least, a "drop-in" center or regularly scheduled child care services during times when programs were scheduled. We strongly recommend that no similar program be commenced without child care services.

Even older citizens have been able to make successful career changes through the aid of sex equity initiated programs. Agnes Weber, a student in the Austin, Minnesota Area Vocational-Technical Institute, stated, "I am a senior citizen and was recently thrown into the work force. I was in a state of confusion and panic. Then I enrolled in 'Expanded Career Choices.' The course gave me confidence, self-acceptance, poise, assertiveness, and a positive desire to set goals, make decisions, and then move out to reach them. I know there are many older women like myself, who would benefit from programs like 'Expanded Career Choices' if only to find themselves and seek the courage to explore the working world."

Homemaking skills, which enable men and women to be self-sufficient, are imperative, as households are increasingly composed of single individuals. Shared responsibility for homemaking tasks is being assumed by both spouses, as well as by children.

The work environment must change in response to a changing society. Men and women must learn to accept each other as co-workers and establish a work place free of harassment and stress. Vocational education, through curricula sensitive to the new roles of men and women, can assist workers in their efforts to achieve these goals. Through positive action, vocational education can help provide the opportunities for all workers to be successful productive employees. In a supporting letter for sex equity project in his community, the president of a Mansfield, Ohio manufacturing company wrote: "The worst thing which can happen to us is to employ a person and then find out a year later they are a square peg in a round hole. Not only have we lost considerable time and expense, but you have a very discouraged individual. The best way to combat unemployment and unproductivity is to prepare individuals for a useful and meaningful career. But, first they need to know what careers match their abilities and aptitudes. The (project) will provide this much needed service for our area."

THE EMPLOYEES

Of all women over the age of 16 years, 51 percent are in the paid labor force. The average woman entering the labor pool at age 16 can expect to work for 41 years. Fifty-three percent of all Black women and 45 percent of all Hispanic women were in the labor force in 1978. With the influx of large numbers of women in the paid labor force in the 1970's, four major equal opportunity issues emerged: occupational segregation, wages, job satisfaction and displacement.

Occupational segregation has been recognized as a major concern for women. Legislation, including the 1976 Vocational Education Amendments, emphasizes the importance of an integrated work force. The Department of Labor, Women's Bureau, states: "The most noticeable features of the American labor market are the industrial and occupational segregation of men and women, differences in the level of responsibility they are given, and in their opportunities for advancement. In fact, this segregation is recognized as the single most important problem facing women in the labor force because it is intimately tied to women's lower earnings . . ." (August, 1980 publication)

Lower pay scales are another employment issue for women. On the average, women earn 59¢ for every $1.00 that men earn. In 1979, one-third of all women were employed in only ten occupational areas: secretary, bookkeeper, sales clerk, cashier, waitress, registered nurse, elementary school teacher, private household worker, typist, and nurse's aide. Of the 24.7 million people below the poverty level in 1977, 58 percent were women and female children. In 1977, while women maintained about 14 percent of all families, they maintained 49 percent of the families below the poverty level.

In *Gunther* v. *County of Washington (1981)*, the court decided that salary rate could not be assigned based on whether the occupation was dominated by men or by women. Vocational education sex equity efforts indicate to future employers and employees that comparable worth in a skilled field is the basis upon which to assign a salary rate.

Integration of the work force and comparable pay rates for women can be successfully accomplished through the cooperative efforts of vocational education, business and industry. For example, labor shortages exist in areas which require skilled technicians, such as machines, machine operating tool and die making, machine repair, industrial computer programming, industrial system analysis and engineering technology. Vocational education can respond by providing training programs designed to meet these employment needs. By helping industry refocus resources, coordinate funding, and develop a commitment to equal opportunity for women and men, the needs of employers and the skills of workers can be matched. Unemployment and underemployment can then be significantly decreased. Additionally, through re-evaluation of traditional occupations, vocational education can encourage men and women to move into fields of their choice, regardless of past dominance by one gender. This can help reduce tensions in the work place resulting from stereotyping skills and contribute to the development of a professional staff.

Nationally, there has been a shift from business and industry that produces goods, to business and industry that produces services. Projected changes in employment from 1978 to 1990 indicate that the greatest percentage of change will occur in two occupational groups: service workers (35.2 percent increase) and clerical workers (28.4 percent increase). A shortage of a quarter of a million secretaries is expected by 1985.

This change in the focus of business and industry has also been affected by increasing energy costs that have decreased employment to conserve energy. The shift to services is also apparent in the growth of large, complex organizations, with increased paperwork needed to manage complex information systems. Thus, computer technology in information management has also been a factor affecting the labor force.

These changes in the work environment mean that nontraditional choices for women may become more limited than previously. Workers, particularly men, may be displaced from their traditional occupations because of reduced labor needs. Competition for available jobs may become more intense. The changes require that traditional work roles be re-evaluated, in order to meet workers' needs for both employment and job satisfaction.

According to research published in the Harvard Business Review (January-February, 1979) since 1950, clerical and hourly wage workers have been expressing decreasing satisfaction with their work and work place. Even in situations where these workers are satisfied with the security and salary aspects, they express dissatisfaction with esteem-related factors, i.e., opportunity for advancement, feeling one is respected by the company, believing that the company listens and responds, and sensing that the company treats one fairly. Since the workers interviewed for this research expressed dissatisfaction with these esteem factors, it was concluded that they had strong disincentives to perform well on the job, since some of the major rewards for good performance were missing. Office worker dissatisfaction has occurred at the same time as employer demand for office workers has increased. With the opportunities presented by vocational education incentives, employers can encourage both men and women to assume office positions and restructure values and customs. At the same time, equal opportunity advancement can be increased.

Another major concern of both men and women workers is displacement. Changes in the focus of business and industry often require retraining of people already in the labor pool. This means that the work force must be increasingly flexible, with employees able to move easily into new occupational areas. Speaking to the need for a relevant sex equity program to serve Ashland, Ohio, residents, an industrial relations manager for a manufacturing company stresses the need: "Improperly placed employees detract from motivation and create morale and productivity problems. Most people, I find, after a number of years in the personnel field need help in this area. Without the program, industry will not achieve the productivity needed to overcome our economic condition."

For industry, displacement means major financial investments to update facilities and equipment. For workers, it means retraining, skill development, and new occupational placement. Occupational education can facilitate these changes by providing equity efforts, retraining programs, linkage with community resources, and target funding to meet the needs of workers to enter and move within the labor pool to new occupational areas as needed. Integration of the work force, comparable salary scales for women, and a reassessment of the values of work will help meet the demands of workers in the 1980's.

THE EMPLOYER

Since 1978, industrial productivity in the United States has declined. American industry has seen the increase of the power of competitive foreign countries. The result has been a reduction in demand, profit, and work force, as well as increases in energy costs. Vocational education can contribute to boosting productivity in the following ways:

In cooperation with employers, vocational education programs can give the work force the flexibility necessary to meet the changing skills market; sex equity efforts are increasingly needed in order to remove barriers to movement within the labor pool and to reshape work attitudes, cooperation and values.

In cooperation with employers, vocational education programs can retrain older workers and develop skills in new workers, so that productivity and job satisfaction can be achieved.

Vocational education can provide updated training as new skills are needed in industry.

Vocational education can provide linkage between the family, the community and work to help men and women realize their full potential.

Vocational education sex equity personnel have begun to make the linkages among the community groups who can help make the differences. From Fort Worth, Texas, [illegible] G. Hays, Coordinator of Hoisting and Portable Engineers Local Union #819, reports: "Approximately 1,000 women had access to the film, 'Breaking Out,' as it was shown in the Department of Labor booth of the Fort Worth Building and Trades Convention. Many of them did not know that women were in the apprenticeship program. The crafts are pleased with the results. Since the conference, many of the female apprentices have been asked to speak to women's groups and school career days.

Employers value and advocate the approach of the sex equity programs. In a letter from a maintenance and fabrication manager of the Ferro Corporation was a message about one of the nontraditional employees who had been trained in a nontraditional vocational education program. The manager states: "Ms. Lonnie May Course Kency has been with our company nearly a year. In that time she has proven herself to be one of the best employees we have. She is among the very top few in attendance, persistence, loyalty, and dedication. She will not do anything less than her very best. The quality of her work is better than most men's. Ms. Kency is one of the few people left who take pride in her work, always trying to do better the next time. I wish there were more like her." Motivation productivity, and satisfaction underline employer's needs and the goals of sex-fair outreach programs.

SUPPORT SERVICES

Clearly, before potential vocational students can make viable decisions about career choices, they must have access to information about job demands in a community, occupational program availability, and salary potentials. To meet this need, prevocational counseling and assessment must be of high quality and readily available to both students and displaced workers. Supportive services as initiated by the sex equity mandates are crucial components to helping members of our society adjust to the current crises of personal and occupational transitions. The following testimonials depict some of the ways that activities have touched upon solutions to these problems:

Lorna E. Carpenter, personnel officer of the Waukesha County Division of Abex Corporation, said: The women's development center has played an integral part in bringing women in the community together with industries such as Waukesha Foundary. In performing this function the center has become a central resource for teaching women and displaced homemakers in realizing their needs and achieving their goals. The dedication, concern, and effort of individuals affiliated with the center continues to promote and advance women into the industrial setting.

From Genelle G. Grant, president of the Women's Center at New Hampshire Federal of Youth Services: In the spring of 1980, the Women's Center was awarded funds by the New Hampshire Division of Vocational-Technical Education, to organize tradeswomen workshops in six high schools throughout the state. These workshops were designed to allow high school students the opportunity to meet with women in the trades of graphic arts, carpentry, electrical work, small business and media operations. Each of the 350 participants tried his or her hands at using some of the tools of the different trades. Tradeswoman was a tremendous success but only a beginning. Thousands of young women and men in New Hampshire's high schools still need exposure and encouragement. They need to hear that it is okay to enter career areas that have heretofore been stereotyped as male or female. The equal access program has provided the means to make inroads in the inequities by sex of vocational education. However, the obstacles are persistent and deeply engraved in this conservative state. To continue the efforts which will provide for the larger pool of trained and talented workers, more funds and resources are needed.

John H. Mueller, employment manager of Envirex Company in Waukesha, Wisconsin, said I would like to take this opportunity to reaffirm our support of the women's development center of Waukesha County Technical Institute. We have utilized the center as a source of qualified applicants to meet our employment needs as well as our commitments to equal opportunity and affirmative action. We have worked closely with the women's development center providing information on the types of work available, plant tours, career information and individual counseling with our clients. I believe that the women's development center is a proven, valuable community resource. The work with women and homemakers re-entering the work force is of particular note. The center's efforts are helping to direct and develop the skills of this important work force element in the Waukesha area.

Ada P. Rippberger, cabinetmaker and graduate student in industrial education said: As a young girl I always helped my father do odd jobs around the house. Therefore, I developed the assumption it was okay for me to do anything. I had a friend who let me work in his workshop as well as learning some of the finer skills of cabinetmaking. My first attempts for obtaining a cabinetmaker job were most depressing. Employers varied from very rude about my presumption of being a cabinetmaker to laughing in my face. I finally managed to get a job at a local factory-type cabinet shop. I was excited until I found that I would not be allowed to use some of my skills.

Attitudes of male workers in the trades are barely starting to improve. Organizations like the women's trade center and state vocational equity must be funded to help speed up the change so that women are allowed fully to do the trade they have selected. Much education is needed, both in the public school system and in industry. The barriers to young girls taking industrial arts classes as well as problems for other women getting into apprentice programs need to be removed. A woman should not have to continually prove herself by outworking others in order to keep her job. Until a more equal base is established, women are going to need support systems and extra help to get into and stay in trades nontraditional to women.

Jacquie Kurland from Albuquerque, New Mexico, a woman in her third year of a four-year national apprenticeship program with the International Brotherhood of Electrical Workers, states: I would like to affirm the necessity, moreover the urgency of the women's trade center. By establishing an informational clearinghouse between employers and prospective employers as well as catering to the needs of women already in the trades through the formation of support groups, the center is providing an invaluable service to women in the community at large. Maintaining support groups is essential to our survival in the trades. As difficult as it is getting contractors to abide by the Federal guidelines of hiring women, it is equally difficult to convince women that completing apprenticeship programs is worth all the struggle. I, myself, had considered dropping out of the program until I discovered, through the women's trade center, support and encouragement of other women who are undergoing similar harassment on the job.

EVIDENCE OF A LONG-TERM COMMITMENT

Havelock and Havelock (1973) have pointed out that any major educational change probably requires long-term planning, ten years lead time or more. Case studies indicate that comprehensive structural changes in the system from the northern European country, Sweden, required 23 years for full implementation. The Havelocks indicate that, for curriculum changes, a 10-year cycle may be possible. A national sampling of individuals who have begun to work in the area of vocational education sex equity shows that we have only touched the tip of the iceberg.

Susan C. White, senior counselor from Tiverton High School in Rhode Island, stated: Over the last two-and-a-half years, I have been impressed with my connection with the sex equity division of the Bureau of Vocational-Technical Education. I have watched "sex equity" become a household word as it were throughout the vocational education departments in Rhode Island's school system. I know that this has been due largely to the funding provided for sex equity, for it is with monetary support that ideals in equality are taken seriously. The promotion of sex equity, especially in education and job opportunities, cannot be left to chance or volunteerism to evolve. The moneys you have received, I feel, have been used wisely, for your name and your mission are known throughout the State. At present, you have the beginnings of a grass-roots campaign developing in the schools.

Sylvia D. Feldman, affirmative action officer at the University of Rhode Island, stated: The work is not near completion. A great deal more remains to be done. To cite a few examples: parents and community involvement in vocational education needs to be expanded; reviews of curriculum need to be conducted so that eventually a new curriculum eliminating sex bias will be developed; educators need further training to ensure that the concept of sex equity is fully understood and fully implemented; educators need technical assistance to assure that programs meet Federal requirements concerning sex equity.

From the East Central Multi-District in Brookings, South Dakota, one official stated: This school has done a complete turn-about. The staff was not open to sex equity ideas or suggestions, especially in the traditional male program. The East Central Multi-District volunteered to be a pilot school to infuse sex equity into their total program. The director today is the strongest advocate for sex equity.

Director Bob Andera said: At first I was very apprehensive about the equity issue. Today I realize it's people going to school, learning vocational skills together. Our students are no longer thinking boy and girl classes.

Connie Hinkle Leinfelder, admissions counselor at 916 Area Vocational-Technical Institute in White Bear Lake, Minnesota, said after praising the support received from the sex equity office in the vocational education department: However, 916 AVTI staff have just begun to acknowledge sex equity and refused to see where problems exist. There is much to do if women and men are ever going to go beyond the current biases and prejudices. We need the support of your office and your valuable information to continue growing and changing the inequities that exist in this school.

COST EFFECTIVENESS

The activities and accomplishments of the full-time personnel have been extensive in efforts to comply with the regulation mandates. The ticket price for this impact has been phenomenally small. Assuming that $50,000 was used for the 50 States and Washington, D.C., the yearly amount of $2,550,000 was expended for the national program. Compared with the total vocational education program costs, the dollar investment in sex equity programs has extemely high return value.

1979 Expenditures

Programs	Percent of funds for sex equity set-aside (percent)
Vocational education:	
Federal, total $550,896,000	0.5
Federal, State, local total $6,473,527,000	.039
Public education expenditures (including vocational education) total $124,400,000,000	.002

In an N.I.E. study of vocational education efforts in sex equity (Benson, 1981), 1,200 LEA's in 10 States were surveyed. Of the secondary education agencies contacted, only 22 percent spent funds to promote sex equity. Of those spending funds, over 66 percent indicated that they had spent less than $1,000. Of the 44 percent postsecondary institutions that spent funds to promote sex equity, about 66 percent spent less than $8,000. Comparing the sex equity accomplishments outlined earlier with the small amount of funds spent to meet those goals, one certainly can conclude that an investment in sex equity is an investment in good business.

One of the major purposes of Title II of the Education Amendments of 1976 was: To develop and carry out such programs of vocational education within each State so as to overcome sex discrimination and sex stereotyping in vocational education programs . . . and thereby furnish equal educational opportunities in vocational education to persons of both sexes . . .

The Title II provisions were not simply anti-discrimination regulations nor were they simply requirements to provide equal access. The Title II provisions authorized

States to spend Federal funds for the remedial actions necessary to insure equal access. The Title II provisions attempted to integrate efforts to promote sex equity into every aspect of the vocational education system.

In September 1980, the National Advisory Council on Vocational Education and the National Advisory Council on Women's Education Programs published a report entitled, "Increasing Sex Equity: A Study of the Impact of the Vocational Education Amendments of 1976 on Sex Equity in Vocational Education." In reviewing the efforts of the States, the study reports that the greatest gains appear to have been made in States: Where monitoring systems to achieve goals and timetables were established; where monitoring systems were established; where funds have been committed to establish sex equity; and, where efforts have been made to utilize the entire State staff to address sex equity issues.

It appears that it is not only the commitment of major funding, but rather the establishment of an entire system that requires, as well as encourages, such activity if sex equity is to be achieved.

Recommendations for further legislation have four underlying themes:

The Vocational Education Amendments should continue to promote sex equity in planning, programming, and funding actions beyond "equal access."

Funding and program requirements for sex equity should be integrated into the entire vocational education system for greatest effectiveness.

Sex equity efforts continue to need representatives in each state: sex equity coordinators, members of state and local advisory councils, and members of state planning committees.

Vocational education funds need to be targeted to meet the needs of special groups such as displaced homemakers, pregnant teenagers, single heads of households and the elderly.

RECOMMENDATIONS FOR LEGISLATION

Given the social, political, and economic climates in which many of the state boards of vocational education function, it is imperative that the Federal role in education continue to be that of assuring equal access to all individuals, especially those which have not always been afforded the opportunity in the past due to traditional conditioning.

Legislation must include the retention of the full-time personnel (sex equity coordinator), the nine functions and the allocation of a minimum of $50,000. While most state boards of education acknowledge the need for these elements, they cannot continue this emphasis unless it is a legislated condition of the vocational education authorization.

State and local planning processes must indicate how their use of federal vocational dollars is directed at meeting the federal objectives, including those of sex equity. In meeting the mission of vocational education of preparing the most productive, highly motivated and skilled work force, it is vital that all components of the supply system understand the benefits of the right person for the right job, regardless of sex, race, handicap, age, or disadvantagement.

There must be legislative directives which require the use of federal dollars to improve the quality of existing programs and to develop programs in some of the new high-technology occupations. While females continue to enter traditional female occupational preparation programs at large rates, curriculum within these programs continue to become dated and obsolete. Federal initiatives in these traditional programs and in those occupations that have not yet been sex-role stereotyped are necessary for adequate preparation that will lead to higher paying positions.

Federal leadership is needed for establishment of a youth emphasis which will develop the skills, knowledge and attitudes necessary for successful participation within the private employment sector. Nontraditional employment of women, minorities and disadvantaged requires unique support services that make the transition cost-effective for individuals, employers, and the general taxpayers.

Federal initiative is needed for vocational education to continue to provide the transitional base required by adults for adjusting to the job availability of the private sector and in the economic development link of reindustrialization. Sex equity in vocational education will make the greatest progress with women reentering the labor force as opposed to young women just beginning.

Federal support is needed in vocational research and development to help create a means through which vocational programs might be reformed to address the equality of opportunity goals of this nation.

APPENDIX.—STATE SUMMARIES

Sex Equity Coordinators are providing technical assistance, resource materials and incentives to motivate change. Special projects and products are serving as model programs to ensure that there will be equal access for both sexes to all vocational programs and activities. Each state has a different annual program of work. However, the state reports indicate similar sex equity activities; a familiar pattern of changes in nontraditional program enrollment statistics; and indication of low nontraditional program enrollment in the same programs in each state.

Activities of Sex Equity Coordinators have continued to change since 1977. The past two years show more "action" and less "creating awareness" of sex equity in vocational education. Coordinators are providing more technical assistance; data is being carefully analyzed; programs that encourage nontraditional training and those providing special services for displaced homemakers continue to promote equal opportunities for students.

The following pages summarize the unique ways in which each of the states is promoting sex equity in vocational education. Included are: brief summaries by state; state profiles of incentives, activity highlights, and enrollment data.

This section of the position paper sketches a picture of ways in which the 1976 Vocational Education Amendments provided the vehicle for action to eliminate sex bias, sex discrimination and sex stereotyping in vocational education programs and activities.

BRIEF SUMMARY BY STATE

Alabama provided funding for all eligible recipients of federal vocational education dollars who submitted a proposal for an exploratory sex equity program. Forty percent of the recipients were identified as model programs that encouraged nontraditional enrollments.

A statewide "talent bank" of local personnel has been set up in Alaska to assist school districts in sex equity training. The widespread geographic range and inclement winter weather demand a telephone and television communications network as well as locally-trained vocational educators to provide technical assistance on sex equity.

Arizona is media-product oriented and has produced films, slide-shows, manuals, newsletters, and simulation games to be used by vocational educators, community groups, and to share with other states. The sex equity program is dependent on successful community networking.

There is recognition in Arkansas that teachers and administrators are meeting the sex equity guidelines in P.L. 94-482, but the real challenge lies in changing the attitudes of administrators, teachers, parents, students and the business community. Priorities are directed at attitudinal change.

The "World of Apprenticeship" is California's film series contribution to sex equity with presentations on operating engineers, the culinary trades, carpenters, and the automotive trades. California serves as a model state for developing cooperative programs with labor agencies and vocational education to recruit females into nontraditional occupations. They also have 600 trainers ready to conduct school-site workshops.

Business, community based organizations and educational institutions are part of a Colorado sex equity communications network. Materials, purposes, needs and other information are collected, analyzed and disseminated. Critical issues for sex equity planning began with gathering opinions of vocational education personnel and with a priority-establishing task force.

Connecticut holds "Women's Technology Exploration Day" for the general public, high school seniors, undergraduates with undeclared majors, and displaced homemakers. They work on math anxiety, listen to women working in technology, and have hands-on tours in graphics, construction, manufacturing, power systems, vocational-technical education and industrial arts education. There is someone responsible for sex equity in every institution with vocational approval.

There is a 25-member state-wide sex equity task force in Delaware that has been operating over 3 years. They have helped develop workshops serving more than 5,000 persons. College credit was offered to some. Many junior high schools are adopting mandated rotations of male and female students in homemaking and industrial arts programs.

Cooperative vocational education is providing work experience in nontraditional occupation for females in the District of Columbia. The program is done in cooperation with the C & T Telephone Company, Giant Foods Corporation, Washington Naval Yard, and the D.C. Department of Transportation. A Project with the Department of Housing and Community Development and the District of Columbia Foundation for Vocational Training helped four female carpentry trainees restore a home damaged by fire.

All model program projects funded in Florida through vocational education are required to coordinate with other agencies working toward increasing the numbers of women in nontraditional occupations. A Santa Fe Community College project was recognized by CETA as one of 25 outstanding nontraditional programs in the nation.

Each vocational area in Georgia provides an outlined summary of progress for sex equity activities. For instance, the home economics program goal was to encourage male members in FHA. All requests for proposals for curriculum development include instructions on addressing sex bias and sex sterotyping. Materials leaving the curriculum center are labeled "non-biased."

Staff incentives for Hawaii's model programs and exemplary projects have been in the form of college credits, stipends, release time, and special publicity for the project. During a five-year period, every high school in the state will have administrators, instructors and counselors participating in an equal goals in occupations workshop.

Idaho provided mini-grants of less than $1,000 each to LEA's for projects and programs to overcome sex discrimination, and for those that address the needs of women. A self-evaluation checklist is used to ensure that sex equity concepts are included in the development and implementation of all program standards.

There is a special program in Illinois to identify and develop techniques for student recruitment that is fair in terms of sex, age, race and ethnic background. A cement mason's/laborer's apprenctice training program is currently training 20 women for jobs as cement mason apprentices or construction laborers in Illinois.

A sex equity component is included in every Indiana workshop and inservice training activity sponsored by the state board. Agencies developing model programs that reduce sex bias and sex stereotyping and those that encourage nontraditional enrollments will be recognized at the annual vocational conference.

All area schools in Iowa insure in writing that they have made an effort to provide catalogs, borchures and guidance activities that are free of sex-role sterotyping and bias. Certificates of recognition are awarded vocational student organizations for developing and disseminating materials to increase the participation of both males and females in nontraditional occupations.

Kansas has a directory of nontraditional workers and a strategies handbook for use with the directory. There was a special project on employment barriers related to sex fairness. The 1981 annual program plan includes establishing pilot multi-purpose centers for displaced homemakers and other special groups.

Three major barriers to nontraditional vocational enrollments in Kentucky were identified in a study done in 1979. There is indication that performance skills are being compared between male and female students. Students believe that nontraditional enrollees are uncomfortable in class. Parents of nontraditional students felt that certain vocational courses were more appropriate for one sex than the other.

Sex equity materials from Louisiana were displayed and shared at the vocational association conference, the association of educators conferences, and the state fair. Officers of vocational student organizations were part of the sex equity advisory council.

Maine provides sex equity mini-grants to correct identified problems. A "resource bank" lists individuals and organizations that are available to assist in promoting sex equity concepts in local agencies. Studies are supported that help improve nontraditional enrollments. Vocational agencies must submit a plan for nontraditional recruitment by January 1981.

Maryland has almost 40 percent enrollment of women in postsecondary trade and industrial programs. The "New Directions for Women" center for displaced homemakers in Baltimore has provided services to over 4,000 women since 1976. The center trains displaced homemakers to present sex equity workshops for high school students as part of their comprehensive program.

An annual admissions update plan is required in selected secondary vocational schools in Massachusetts. Admissions procedures, practices and policies are described on the basis of applications, acceptances, and enrollments by sex, special needs, limited English speaking, and ethnic origin. Nontraditional vocational students produced four booklets to help others start nontraditional support groups.

A Michigan study of the earnings gap between male and female graduates for 1977 and 1978 shows that men continue to earn higher salaries than women though there are signs toward salary equalization in the health occupations. Program improvement grants for sex equity materials went to 480 secondary agencies and 29 community colleges.

Local education agencies in Minnesota prepare "Five Year Sex Equity Plans of Action" which are approved by the local school board. Technical assistance and a handbook on developing action plans come from the sex equity coordinator. Each area vocational-technical institute has a sex equity committee.

A state sex equity poster contest was held in Mississippi in 1980. The three winners received cash prizes at a special awards ceremony. The first place poster was printed and disseminated to all state educational instituions. Many local districts held their own contests.

There were $100,000 worth of free public service announcements on vocational education sex equity on Missouri television and radio stations. Project priorities encouraged nontraditional enrollments, and included handbooks for recruiting females into trade and industrial programs and males into health occupations. Twenty LEA's will receive special funds for increasing nontraditional enrollments by 10%.

Nontraditional and equal access to vocational programs was the subject of Montana's Superintendent of Public Instruction's radio announcements. Three-day workshops were held for vocational instructors in five locations. Travel reimbursement, lodging and per diem were offered as incentives.

An evaluation instrument in Nebraska contains quality indicators designed to identify potential obstacles to equal access. A research project on males and females in nontraditional occupations is looking at successes, problems, positions, and salaries of nontradition workers. Two projects have been funded to enhance minority women's success in vocational training and employment.

In-service training on sex equity was provided to all Nevada vocational conference. There was a brochure and bulletin board project to encourage males to enroll in home economics programs. Another project encouraged 30 to 50 year olds to return to school and train in nontraditional programs.

Teacher certification requirements in New Hamphsire include competency in both sex and race equity. Dollars were made available to help train two female industrial arts teachers. Proposal writers have received guidelines on how to prepare a sex-fair proposal.

New Jersey was the first state to develop a director of people in nontraditional jobs. Presentations on nontraditional careers and related in-service activities for teachers traveled in a mobile van to various school sites. A special project was funded to improve the career aspirations of female Hispanic youth.

A statewide senior essay contest was held in New Mexico on "How Sex Stereotyping Can Affect My Career Choice." Prizes were a $50 savings bond and a commemorative plaque. A young mother's center provides support services for school-aged parents who need to continue high school and to enter the work world.

Special recognition has been given to New York sex equity documentaries in film festivals. Public service announcements have been aired 300,000 times. A job network information service announces administrative job openings and maintains a pool of over 500 job applicants, resulting in a 100% increase in the number of female educational administrators.

The sex equity incentive system in North Carolina provides certificates of achievement and press coverage to LEA's showing nontraditional enrollment changes, staff development programs, and local action plans. CETA funds managed through the Council on the Status of Women, helped train women in bricklaying, carpentry, heavy equipment operation and electrical wiring.

There are regional sex equity activities in North Dakota that include equity workshops for vocational educators. Each educator from the eight regions is required to do an activity in his/her own school. Mini-grants are offered to LEA's.

Males and females are changing their thinking in Ohio as females have significantly increased enrollments in 58 nontraditional programs and males have increased enrollments in 32 nontraditional programs over a three-year period. A publication on improving sex equity in career education and vocational classrooms has served as a self-help document for vocational personnel.

There are three rural displaced homemaker programs in Oklahoma that are a cooperative effort between the State Departments of Vocational-Technical Education, Economic and Community Affairs, and the regional office of the Department of Labor. "Voc-Tech Encounters of the Nontraditional Kind" was the clever title of area workshops.

A phone-in education project in Oregon helps displaced homemakers, single parents, part-time workers, and handicapped persons improve their job skills, particularly business math and basic skills. Another project seeks jobs with private industry for women who are economically disadvantaged, unemployed and underemployed.

Pennsylvania's program to coordinate sex equity efforts between vocational education and CETA prime sponsors is unique. The state board policy on sex equity encourages the involvement of parents and the community as well as sex-fair instruction and counseling.

Sex equity materials are presented in Spanish in Puerto Rico where a top priority is the recruitment, retention, and placement of women in nontraditional vocational programs. In agricultural production there has been a change from 65 females in 1977 to 152 females in 1979 and in child development and guidance from 36 males in 1977 to 101 in 1979.

There have been three statewide sex equity conferences in Rhode Island for educators, legislators, community-based agency personnel, and parents. A separate nontraditional options workshop was held for parents of ninth grade students. Over 350 women attended a job information fair sponsored jointly by the Associated General Contractors and the Bureau of Vocational-Technical Education.

Prospective employers of nontraditional workers in South Carolina were consulted for suggestions on how to effectively place women in the work force. An exploratory program for females in welding includes on-site visitations of welding industries for counselors, principals, district office staff, and welding teachers.

South Dakota held a youth organization cartoon contest entitled, "Sex Equity in Today's Life." The State Board staff works with the Board of Charities and Corrections to provide apprenticeship or cooperative education work placement release opportunities, emphasizing nontraditional opportunities for inmates of the women's correction facilities.

More than 500 Tennessee vocational programs were reviewed in 1980 for progress in sex equity. Representation of women on vocational advisory committees was a priority. Curriculum materials were updated to be sex-fair in most programs.

Three years ago, there were no female welding students in Texas. A special project encouraged 85 women to enroll. Twenty-five thousand sex-fair vocational program brochures were printed and mailed to local independent school districts. A current thrust is to increase equal access and equal opportunity concepts to vocational guidance personnel.

A four-year Utah program encourages vocational opportunities through equity in 21 education agencies. Workshops for students and parents, sex-fair instructional activities, employer tours, media production, and development of an equity indicator instrument are all part of the expanded career selection project.

Nontraditional careers are promoted in Vermont and a thrust has been made to encourage the recruitment of nontraditional vocational teacher training. Media coverage of exceptional programs, commendation letters to school districts and award certificates to teachers are annual incentives.

The Virginia vocational sex equity office provided funds for a workshop to prepare home economics teachers to work with displaced homemakers. Aviation careers were explored in a 12-week orientation and ground school program. Participants completed the federal aviation administration examination. Four college scholarships were given to students preparing to teach in a nontraditional program.

Each community college in Washington has programs and services for displaced homemakers and support services for women partially supported through federal vocational funds. A K-12 equity network meets bimonthly to discuss and share materials and information. The sex equity resource library disseminates over 3,000 requests annually.

There are more than 10% females in all but ten of West Virginia's trade and industrial programs. Each LEA is required to submit an annual plan for recruiting males and females into nontraditional programs. Specific emphasis is on the placement and follow-up of nontraditional program completers.

The sex equity awareness for parents compaign in Wisconsin consisted of nontraditional career brochures, radio announcements, posters and role models for parents to encourage their children to consider nontraditional programs. A vocational equity incentive system provides up to 15 points each fiscal year toward federal reimbursement dollars to LEA's. More than half of the eligible recipients participated.

A study of the barriers to employment and vocational education services in Wyoming as perceived by rural women was conducted in six counties. Emphasis on inservice training for state and university staff on sex equity materials and techniques is a priority for 1980-1982. Special projects encouraged women to enter agriculture and construction technology programs.

STATE PROFILES

Alabama

Grants were provided for model programs to reduce sex bias and sex-role stereotyping. Among them was a handbook "Equity for Local Superintendents and Local Directors of Vocational Education, Title IX Coordinators and Section 504 Coordinators." Special programs supporting women in nontraditional roles attracted over 500 participants. Displaced homemakers were a priority in the postsecondary schools. Cooperation between women's groups and CETA helped with services in job exploration, job seeking, and job interviewing.

The sex equity coordinator participated in on-site reviews and monitored the sex equity plans in 127 annual applications. Special efforts were made to ensure equal facilities and equipment for both sexes.

Enrollments from 1977 to 1980 show an increase of females in 7 Agriculture programs and 11 Trade and Industrial programs. Male enrollments in nontraditional programs increased in Health Occupations and Home Economics. Distributive Education is tending to equalize male/female enrollments throughout the programs. Enrollment data were distributed to local area personnel along with recommendations for providing nontraditional training opportunities.

Alaska

Sex equity self-evaluations were completed by all local school districts and technical assistance was provided to help efforts in reducing sex sterotyping in vocational programs. A statewide talent bank of administrators, counselors, and vocational educators were trained to assist local districts in promoting sex equity.

Follow-up surveys from local counselors and administrators identified problem areas that needed attention. This included the lack of women vocational education instructors in nontraditional areas and recognition of a retention problem of males and females enrolled in nontraditional courses.

Enrollment data shows few students in nontraditional training and special efforts are being made to improve enrollment patterns. Data is distributed to the State School Board, the State Advisory Board for Career and Vocational Education, the State Commission on the Status of Women and the general public.

Arizona

A citizen's task force on sex equity was formed at one community college and included representatives from business and industry, education, and government. Television public awareness programs and numerous audio visual products helped citizens accept men and women in nontraditional jobs.

All the high schools in one county benefited from a project called "New Frontiers," developed for teachers, parents and students. One phase of the project was a summer institute for selected junior high school students to introduce them to a variety of vocational curricula.

Six displaced homemaker programs were funded to provide educational programs to prepare displaced homemakers for seeking employment. A statewide technical assistance project provides assistance to educators working with displaced homemakers. Activities included a statewide conference on displaced homemakers, four widely-distributed newsletters, and regional workshops.

Arkansas

Career fairs are sponsored in schools to give students the opportunity to explore nontraditional careers with nontraditional workers. Students are recruited in junior high to go into nontraditional programs in high school. Exploratory courses are recommended and field trips are taken to observe nontraditional employees on-the-job.

Special committees review sex equity guidelines and monitor for sex equity compliance. Local advisory boards are utilized in recommending further action. Students are encouraged to enter nontraditional competitive events in student organizations. Junior executive training programs that show equal number of males and females have been developed. Family living classes encourage males to learn household responsibilities.

Female enrollments have increased greatly in agriculture production, carpentry, drafting, electronics, graphic arts, and distributive education. Male enrollments have a large increase in home economics, commercial art, quantity foods, typing, nurse aide, and textile production and fabrication.

California

Community colleges have funds to develop plans to recruit, retain and place nontraditional vocational students. Secondary districts have special projects to modify one or more programs to achieve sex equity. Incentives are provided for model programs to increase nontraditional enrollments. All community colleges were required to use 50% of their subpart 3 allocation for sex equity in 1980–81.

"The World of Apprenticeship" is a series of four slide/tape programs that show nontraditional roles in construction, operating engineering, culinary art, and the auto mechanics. Labor unions are playing a major role in developing this series. The materials have been made available for use throughout the country. "Jack and Jill of All Trades" is a project that developed recruitment posters and brochures for each vocational program area.

Linkages between the Department of Labor agencies and the Department of Education agencies have resulted from the Sex Equity Coordinator's efforts. The Coordinator is a member of the Women in Apprenticeship Committee sponsored by the Division of Apprenticeship Standards. A coalition has formed between labor and education to recruit females into nontraditional occupations.

Enrollments show a trend toward 25% to 75% of one sex or another in most programs. There are significant increases in male enrollments in Health Occupations and Office Occupations.

Colorado

A "Sex Equity Communications Network" links Colorado businesses, community-based organizations and educational institutions throughout the state. These groups send sex equity needs and purposes to the network office where they are analyzed and compiled and disseminated upon request.

A statewide 'opinionnaire' was distributed to vocational personnel requesting identification of critical areas for study in sex equity. A slide/tape presentation entitled, "Exploring Nontraditional Careers in Vocational Occupations" was developed for persons up to age 21 who need help in deciding on career goals. It includes information on the state's role in vocational education, discussions with students and employees in nontraditional careers, salary information, how to apply for courses and receive financial aid where necessary.

Enrollments at the secondary level which show an increase in nontraditional participation include cooperative merchandising, food management, business data processing, ornamental horticulture, criminal justice, commercial art, banking and finance. Postsecondary education enrollments showing a 40–60% nontraditional enrollment include: greenhouse operation, nursery operation, real estate, food services, computer programming, petroleum technology, urban planning, environmental protection, and electronics.

Connecticut

During 1980–81 a special emphasis was placed on increasing the participation of adult women in technical and trade training and increasing inservice training in sex equity for administrators, counselors and instructors in vocational programs.

A mini-grant program aimed at increasing emphasis in specific sex equity programs substantially increased the displaced homemaker program from $20,000 to $128,000. Where extra support has been added to nontraditional programs, enrollment of women has moved from 18% to 35% in one year (1979–80).

Eleven mini-grants were funded and included "A Model for Providing Parental Awareness of Sex-Role Stereotyping;" "Women's Technology Exploration Day." "Equalizing Opportunity in Vocational Education at the Junior High/Middle Schools," "Eliminating Vocational Sex-Role Stereotypes by Children Through Creative Activity in Playwriting and Musical Composition," and "Programs for Displaced Homemakers and Women Seeking Technical Careers."

Enrollments at the secondary level have shown an increase in females in carpentry, industrial drafting, electrical, electronics, plumbing, sheet metal and welding. At the postsecondary level, increased male enrollments are evidenced in homemaking and stenography, secretarial and related, health service occupations and personnel training.

Delaware

Special projects have been funded to include sex equity in occupational materials, introduction to nontraditional careers for women, changing work roles for men and women, nontraditional business careers, and Vocational Education Work Experience and Survival Workshop for Displaced Homemakers.

Quarterly reports on sex equity activities are submitted to the State Board of Education, the Governor's Commission on the Status of Women, the Advisory Council on Career and Vocational Education, the Task Force on Sex Equity and to other intereted persons. Activities include a workshop entitled "Women Get In Gear" which focused on nontraditional jobs in trades and technologies. The sex equity coordinator approved over 1,000 projects which addressed sex equity as a major objective or activity.

Some junior high schools have adopted rotations of students through homemaking and industrial arts education programs; and two voc-tech institutes have offered summer programs for seventh and eighth grade students to explore nontraditional career options.

From 1977 to 1979 there has been an increase of females in agri-production, agri-products, horticulture and forestry. There has been an increase of males in health occupations and dental assisting, care and guidance of children, clothing management and food production and services. Technology programs have seen a large increase of women in architectural, civil, mechanical, fire and fire safety, and water and waste water technology. There has been an increase in male enrollments in filing, office machines and clerical occupations.

District of Columbia

A cooperative education on-the-job training project for females was supported by the Telephone Company, Giant Food, Washington Navy Yard and the Department of Transportation. Four female carpentry trainees worked on a project to restore a home completely gutted by fire. A cadre of student leaders was trained to present sex equity mini-workshops to students in thirty junior high schools. A 60-minute film called "Profile of Women in Nontraditional Trade Areas in the District of Columbia Metropolitan Area" was produced.

Cooperating organizations included Wider Opportunities for Women, DC Commission for Women, Minority Women in Government, Local Advisory Councils for Vocational Education, Roving Leaders (a DC recreation group), Far-East Community Services, Community Improvement Services and the United Planning Organization.

Enrollments over a three-year period indicate an increase of females working in nontraditional roles of hotel/lodging, drafting and electronic occupations. There was an increase in the number of males in clothing/textiles, consumer education, home management, accounting and computing occupations, filing, office machines, clerical and stenographer-secretarial related occupations.

Florida

Funds are made available in all program areas to assure equal access and equal opportunity in vocational training. Exemplary sex equity programs are honored monthly in the Florida Journal of Vocational Education. A State Advisory Council for Sex Equity makes recommendations to the State Director of Vocational Education.

All sex equity projects that are funded as model programs are required to link with other agencies that have a priority of increasing the representation of women in nontraditional occupations. Cooperating agencies include CETA, higher education and Title I programs. One of these projects was recognized by CETA as one of 25 outstanding vocational education programs in the country.

More than 22,000 equity posters were distributed in the state. A series of eight videotapes on how to organize a support system program for nontraditional students was developed for administrators as well as a slide-tape course on sex stereotyping for vocational guidance personnel.

All vocational programs have at least 15 percent males or females. Male enrollments have shown the greatest increase in home economics, business occupations and health occupations over the past four years. The greatest female enrollment increases have been in distributive education programs.

Georgia

Twenty vocational educators were trained from postsecondary educational vocational schools, CESA districts and selected school systems to conduct sex equity workshops in local education agencies. "Project Explore," funded by the Georgia Employment and Training Council is aimed at increasing the enrollment of CETA eligible males and females in nontraditional programs. Brochures to advertise T & I programs were developed. The Marketing and Distribution staff encourages teachers to place male and female students with employers who are using the targeted tax credit program. The "Report on the Status of Males and Females in Vocational Education in Georgia," developed in 1980, includes a summary of the percentage of males and females in the vocational teaching staff, local and state administration, as well as student enrollment, completions and placements in vocational programs and CETA programs.

Enrollments show an increase of females at the secondary level in 14 trade and industrial courses. Male enrollment at the secondary level has increased in health occupations, homemaking, industrial arts and business education. In postsecondary schools increasing female enrollments are shown in forestry, civil technician, electrical technician, electronics technician electro-mechanical technician, and mechanical technician. Male enrollment at the postsecondary level has increased in practical mursing and nursing aide.

Hawaii

Several model programs and exemplary projects were developed at the secondary and postsecondary levels. Project participants received college credits, stipends, publicity, travel funds, and release time as incentives.

One community college developed a profile of sex inequities in the vocational program of their own campus and students participated in the project by collecting and analyzing data. Brochures were prepared to encourage female participation in male-dominated training programs and male participation in female-dominated programs. A video-tape of students and instructors discussing their successes in dealing with sex-role stereotyping has been produced. Large photographic display cubes were constructed and are on display in a community college career center.

A high school participated in a project identifying barriers to achieving sex equity and suggesting strategies to overcome these barriers. A statewide plan calls for the participation of all high schools in the state in an EGO (Equal Goals in Occupations) project within three years.

Special projects include the design of eight posters depicting men and women in nontraditional careers; workshops on each community college campus and a statewide workshop for secondary schools personnel to discuss strategories to achieve sex equity a monthly newsletter informing schools about model projects, research reports and strategies to increase sex equity, and a directory of people in nontraditional careers.

The number of females enrolled in traditionally male-dominated programs, at the secondary level, has more than doubled between 1976-77 and 1978-79. Male enrollment in the traditionally female-dominated programs of clothing, food, and home management has increased by 53 percent. The community college system vocational enrollments show an increase of females in the two-year management program, mid-management merchandising, aeronautics technology, agriculture, graphic arts, carpentry, drafting technology and marine technology. There was and increase in male enrollment at the community college level in associate degree nursing and radiologic technology.

Idaho

Mini-grants were offered to LEA's for projects and programs designed to encourage men and women to enroll in courses considered nontradional for their sex. The grants were in the amounts of $300, $500, and $1,000. The state has a set of standards for sex equity in vocational education that are supported at the state and local levels.

Special projects included a fourteen-hour sex equity program for counselors that was presented regionally; workshops on sex equity concepts in curriculum were presented to vocational instructors in secondary and postsecondary institutions; the sex equity coordinator conducted awareness workshops for outside interest groups (Department of Labor, AAUW, YWCA, League of Women Voters, Department of Ecology); a resource center for the LEA's which includes audio-visual materials, reference and bibliographies was maintained; and research was completed to analyze student enrollment paterns in vocational programs, student perceptions, and salary and staffing patterns of faculty.

Illinois

Seventeen mini-grants were awarded to LEA's to support model or exemplary programs and activities to eliminate sex discrimination, sex bias and sex stereotyping in vocational education.

The Resource Center on Sex Equity produced a resource packet to assist LEA's in implementing staff development, continuation training and technical assistance activities. This project included a two-day training program for state staff and a four-day training of trainers program for a cadre of vocational educators.

One project identified and developed fair techniques for student recruitment in terms of sex, age, race and ethnic background that are to be used by high schools, area vocational centers and community colleges as they recruit students. Two projects targeting the needs of women are: an exemplary women's program that focuses on occupational development for community colleges, and a program for women in vocational education administration. In addition, a cement-mason's/laborer's apprentice training program was funded to train twenty women. This project was coordinated directly with the Cement Masons International Association, Local 90; and the Laborers International Union, Local 100. A curriculum provides classroom materials which create awareness and help eliminate sex bias, sex-role sterotyping and sex discrimination.

There has been an increase in the number of males enrolled in food services, recreation/tourism, associate degree nursing, practical nursing, medical assistant, health aide, food management/production services, other personal services and upholstering.

Examples of enrollment increases of females in nontraditional occupations are in three agriculture programs, five marketing and distribution programs, eleven technology and sixteen trade and industrial programs including firefighter training and law enforcement training.

Indiana

Projects for displaced homemakers include "Training Programs and Support Services Necessary to Meet the Needs of Displaced Homemakers: A Regional Model" and "Matching Displaced Homemakers with Vocational Opportunities—Support Services—Referral Agencies." "Gender, The Irrelevant Variable" is a guide for combatting sex bias with training for administrators and counselors. A component of sex equity is included in every workshop and inservice training program sponsored by the State Board. Twelve workshops were held in the summer of 1980 and over 1,000 handouts were disseminated at these meetings. The State Board facilitates a round-table forum that includes all social service agencies involved in providing services for displaced homemakers and other special groups and makes recommendations for future programs, services and activities.

Secondary female enrollments in agriculture have gradually increased each year by about 1%. Male enrollments at the secondary level in the health area have increased by 3% each year.

At the postsecondary level, the greatest gains in female enrollments are in agriculture production, horticulture and cooperative programs. Civil technology, industrial technology, auto mechancies, commercial art, photography, carpentry, construction and maintenance, supervisor, graphic arts, machine tool and welding also show positive gains at the postsecondary level.

Nontraditional enrollment increases for males are in health occupations and occupational home economics. Slight gains were in nursing, mental health technology, food management courses, care and guidance of children and cooperative programs.

At the adult level, females increased their participation in agriculture production, mechanics and horticulture. Males gained in occupational home economics.

Iowa

Local education agencies selected among the following projects to receive funding for sex equity projects: develop a model program promoting sex equity and encouraging nontraditional enrollment; develop, print and distribute local policy and procedure bulletins and booklets to reduce sex bias or sex-role stereotyping and encouraging nontraditional enrollments; conduct or provide staff development activities which are designed to reduce sex bias and sex-role stereotyping and encourage nontraditional enrollment develop, print and distribute a wide variety of sex equitable media, print and nonprint to be used in recruiting students in nontraditional careers; develop awareness activities for employers designed to reduce sex bias and/or sex-role stereotyping as it relates to occupational placement; develop support services for students enrolled in nontraditional training programs.

Multi-cultural nonsexist state conferences for math/science, social studies, language arts and physical education and health were conducted. A simulation workshop on craftswomen in the schools was held by the Commission on the Status of Women in cooperation with sex equity coordinators in nine high schools across the state.

Area schools provide catalogs, brochures and guidance to students which are free of sex-role stereotyping and bias. "Promoting Sex Equity in the Classroom: A Resource for Teachers—Voctional and Technical Education" includes 12 modules which deal with eliminating sex stereotyping in programs and courses.

There is progress in nontraditional female enrollments at the secondary level in industrial marketing, agricutural products, and small engine repair. At the postsecondary level, there is an increase of males in hotel/lodging and in environmental health and of females in police science technology and machine shop. At the adult supplmentary level, there is an increase of males in uphostery.

Kansas

Thirty sex-fairness packets contained instructions and visual aids to help vocational teachers achieve sex equity. "Expanding Student Options" is a handbook that was disseminated statewide. One special project was a Directory of Non-Traditional Workers. Another identified sex bias barrier to urban and rural employment. Sex-fair criteria for reviewing proposals were distributed and all projects and grants were reviewed for sex bias.

Displaced homemaker projects included identification of needs, a rural outreach model program, and special workshops for vocational educators serving displaced homemakers. A pilot multi-purpose center was established in 1981 to provide support services to displaced homemakers and other special groups.

Nontraditional female enrollments have increased in 15 programs that include body and fender repair, carpentry, small engine repair diesel mechanics, machine shop, welding, and firefighter training. Male enrollments at the secondary level are increasing in home economics, office occupations, health occupations and cosmetology. In postsecondary programs, male enrollments have increased in most health technology programs, care and guidance of children, food management, office occupations, veterinarian assistant, and cosmetology.

Kentucky

Manuals were developed to provide sex equity strategies for vocational teachers, counselors and administrators. They included ideas on recruiting nontraditional students, sex-fair teaching techniques, checklists for evaluating materials and guidance tests, ideas on who should provide support services for nontraditional students, grievance procedures and several awareness and enforcement activities.

"The Coal Employment Project" is a model program to train women for entry-level coal mining occupations and how to cope in a field dominated by men. The course has 15 hours of orientation and 48 hours on safety in mining jobs.

Another project was done to increase nontraditional enrollments and provided co-operative vocational work experience for students. Coordination was done with the Bureau of Apprenticeship and Training, the Veteran's Administration, the Bureau of Manpower Services, the Bureau of Rehabilitation Services, job placement centers, prison staff, and the local news media.

Female nontraditional enrollments increased in 26 programs such as civil technology, natural resources, computing occupations, electronics and drafting. Male enrollments increased in clothing, food management, and institutional and home management.

Louisiana

"Change" is the appropriate name for a newsletter published by the sex equity coordinator's office. Materials developed by the office have been disseminated through an information booth at professional conferences and at the state fair. Included is information on a Speaker's Bureau and data on enrollment, placement, and compensation of students in cooperative work study verifying equity in the numbers of male and female students.

The sex equity coordinator participated in a TV talk show that reached 25,000 households. Public service announcements on sex equity in vocational education were aired throughout the state on commercial and educational TV. Sex Equity Advisory Council meetings include officers of vocational student organizations.

A needs assessment was done on opportunities for women that resulted in a project to help upper high school females become aware of opportunities in industrial arts. These young women were provided hands-on experiences in woodworking, carpentry, drafting and painting. Another vocational project was a displaced homemaker center.

Female enrollments have increased in 17 areas including forestry and scientific data, business machine maintenance, masonry, small engine repair, aviation occupations and blue print reading. Male enrollments have increased in 12 areas as food distribution, personal services, health occupations and cosmetology.

Maine

Mini-grants were awarded that provided a range of sex equity activities including model sex equity programs, public service announcements and sex-fair brochures announcing vocational programs. A special project supports studies of programs that continue to represent low male or female enrollments.

Media was displayed at two fairs, as public service announcements on TV stations, and through a slide/tape presentation of male and female students in nontraditional vocational programs. Special efforts have been made to identify resource persons to promote sex equity concepts with local education agencies.

Project BEACON (Building Equity and Creating Options Now) was developed to promote sex equity among students and faculty. In 1981, vocational centers, regions and institutions were required to plan for recruitment of persons into nontraditional programs. A pre-vocational training program for displaced homemakers has been established in one vocational-technical institute.

The sex equity coordinator reviews affirmative action plans as they relate to employment hiring, firing and promotion.

Vocational institutes had an increase since 1977 in 12 vocational areas that would be considered nontraditional for women and in two programs considered nontraditional for men.

Maryland

A cooperative project with the Commission for Women called "New Directions for Women" has been funded since 1976. The major activity is a center for displaced homemakers which has provided support services to more than 4,000 women over 35 years old. Other activities include pre-training for females in nontraditional occupations, job development and training, conducting sex equity training programs for employers and community groups, training displaced homemakers to do sex equity workshops for high school students, and developing media and materials on sex equity.

Studies were done on the value and effects of vocational education and on student perceptions of counselors and counseling services. Both studies indicated the need for further research in sex equity.

Enrollment data shows an increase of female students in agriculture and trade and industrial programs. Male enrollments have increased in vocational home economics, consumer and homemaking, and business and office education.

There are approximately twice as many women nontraditional students in postsecondary programs as there are in secondary programs. It is projected that there would be 40% female enrollments in trade and industrial programs by 1982.

Massachusetts

All applications for vocational education funds submitted by local agencies include: a plan for recruiting nontraditional students; efforts for reducing sex bias; a commitment to review all materials for sex and ethnic stereotyping; and documentation of affirmative action employment practices.

The staff of each Regional Education Center have been trained to provide technical assistance on sex equity to local schools. In-service training funds for eliminating sex bias are available for local vocational educators.

Recent graduates of vocational programs have been instrumental in producing four booklets to inspire peer-support-groups for students in nontraditional vocational areas. "Portraits" is a collection of character sketches of students in nontraditional programs. A guide was produced to help vocational educators develop ways to increase access to all programs for all students.

Eleven special programs for displaced homemakers provided outreach, assessment, counseling, skills training, placement, and follow-up. Emphasis was placed on non-stereotyped skills training such as electronics technology, word processing and metal fabrication.

The enrollment of females in vocational programs has increased over 20% since 1977. The greatest increase has been in the following order: technical education, agriculture and trade and industrial education.

Michigan

Grants were given to local agencies to field test a model placement program with a goal of increasing nontraditional job placements. Funds to develop sex equity materials went to 480 secondary schools and 29 community colleges. Additional dollars were awarded to plan and implement programs to recruit males and females into nontradtional programs and courses.

There are three displaced homemaker centers throughout the state, women's resource centers in 14 community colleges and 26 other agencies, and a tuition reimbursement program for displaced homemakers in 29 community colleges.

Secondary female nontraditional enrollments show an increase in agriculture and trade and industrial programs, particularly in electricity, drafting, and graphic arts. Male enrollments have increased in medical lab assistant, dental assisting, nursing assistant aide, associate degree nursing and institutional home management.

The greatest increase of female nontraditional enrollment has been in graphic arts, carpentry, auto mechanics, electronics, aviation, and air conditioning. There are equal or balance enrollments in horticulture, food distribution, general merchandise, food management, commercial art, and commercial photography.

Minnesota

Three projects aimed at helping displaced homemakers were developed. They consisted of an outreach program, inservice recruitment ideas, part-time training opportunities, resource materials, and a sound/slide presentation that explains the problems displaced homemakers face and offers solutions to these problems.

A survey of women in nontraditional vocational programs was done to determine the support needs of women. Project GATE (Growth in Agriculture Through Equality) encourage career choices for women of all ages in agriculture and agri-business through a slide/cassette presentation and a handbook.

An organization of female apprentices called "Women In The Trades" was established and scholarships awarded to students in nontraditional programs at one vocational-technical institute. "Guide for the Student Seeking Information About Nontraditional Careers, Child Care, Community Services and Support Services" is a publication of one area VTI.

There has been an increase in male enrollment in health occupations, care and guidance of children, clerical, filing and records keeping, stenographer and secretarial-related programs. An increased female enrollment has occurred in agriculture supplies/services, logging, distribution and insurance, electricity technology, construction and maintenance trades, plumbing and pipefitting, custodial services, machine tool operator, welding and cutting, tool and diemaking, and small engine repair.

Mississippi

There are displaced homemaker centers at four junior college campuses in Mississippi and a CETA-funded project of $140,000 was awarded to expand the services of one junior college center. Each center has a full-time coordinator. The centers have a basic two-week program for students that includes self-assessment, understanding values and goals, communications, career decisions, career exploration, personal appearance, interview skills and application and resume preparation. Each center's coordinator works with state employment services on a continuing basis in order to locate jobs for students. Referral services are provided as well as outreach activities.

A poster contest was implemented in 1980 through the vocational guidance office. The first, second and third place winners were presented cash prizes at a special awards ceremony. The first place poster was printed for dissemination to all schools within the state.

Mississippi has had some shifts toward nontraditional enrollment for women at the secondary level in the following programs: agriculture products, ornamental horticulture, forestry, hotel/lodging, custodial services, electrical occupations and communications. Male enrollments that have increased at the secondary level were in automotive and institutional home management.

Postsecondary increases in women's enrollment were in animal science, inhalation therapy, accounting, nuclear technology, drafting, printing press, barbering and upholstering. Male enrollments at the postsecondary level were in food distribution, medical lab assistant and food services.

There were equal enrollments of 40 to 60 percent male or female in FY 79 at the secondary level in floristry, real estate, business data processing and home management, and equal enrollments of 40 to 60 percent male or female at the postsecondary level in general merchandise.

Missouri

In FY 1980, six grants to overcome sex bias and sex stereotyping were issued and fourteen special incentive projects for overcoming sex bias and sex stereotyping were implemented. An audio-visual program aimed at attracting males in home economics was developed and a workshop was presented to increase awareness of opportunities for women in math and science-related fields.

Six displaced homemaker centers were funded out of vocational education and CETA funds. One of the well-known slide/tape presentations. "There is a Kangaroo in My Classroom" contains recruitment strategies to increase nontraditional enrollments. Public service spot announcements were televised and broadcast on radio; slide/tape presentations for recruiting students were produced in welding, health occupations. Titles included "It's Your Right", "Oh, Yes You Can", "It's Time", "Men and Women in Office Occupations," and "Moving Up in Business—Rewards and Sacrifices."

Twenty-one programs showed a significant nontraditional enrollment change from 1976 to 1979. The programs with increased female enrollments were in agriculture supplies/services, agriculture products, insurance, construction technician, custodial services, other metalworking occupations, and law enforcement training. Programs with a significant change in male enrollments are in floristry, dental assisting, comprehensive homemaking, child development, home furnishings, institutional home management, and personnel training/related.

Montana

Reimbursement for travel, lodging and per diem to attend training workshops; free resource materials, and mini-grant awards were among incentives offered to local school districts.

Radio spot announcements were produced including reports from the Superintendent of Public Instruction; three-day sex equity workshops were conducted in five sites; a survey was done to assess the needs of displaced homemakers and single heads of households which resulted in job readiness workshops and career/life planning workshops.

There has been an increase in women's enrollment in three nontraditional programs: agri-mechanics, electrical technology, and instrument maintenance repair. Male enrollments increased in five nontraditional programs: two in health occupations, two in business and office occupations, and one in comprehensive homemaking.

Nebraska

Numerous special activities and projects relating to sex equity in vocational education have been conducted. Packets entitied, "Free to Be," have been assembled and are being distributed to local vocational educators. Field trips were provided for students to view nontraditional occupations with orientation sessions before the trip and a follow-up survey after the project was completed.

"Women in Transition" was implemented with the help of the Nebraska legislature and the Nebraska Equal Opportunities for Displaced Homemakers Act and provided two centers for displaced homemakers. Center services included aptitude assessment, workshops on job readiness, job seeking and job retention, and referrals to community services training and placement programs.

There has been an increase of female enrollments in agriculture production, ornamental horticulture, industrial marketing, air conditioning, body and fender repair, commercial art, commercial photography and quantity food occupations.

Male enrollments have increased in filing, office machines, clerical occupations, clothing management and production, food management and production, clothing and textiles, family relations, food and nutrition, and home management.

Nevada

Incentives to encourage sex equity in vocational education include making funds available to LEA's to develop bias-free curriculum materials, recruitment procedures and materials, model programs and bias-free tests in vocational education.

Radio commercials for all occupational programs with emphasis on equal access were produced. A special project called, "Back to School. Back to Work," encouraged 30–50 year olds to return to school and enter nontraditional vocational programs.

School districts and community colleges were awarded mini-grants to assist in developing innovative techniques in increasing their efforts and promoting equal opportunities. A pamphlet called "Equal Vocational Education" was distributed to all vocational administrators, vocational teachers and counselors in secondary and postsecondary institutions.

New Hampshire

Discretionary funds have been provided to update data so that the management information system can include data on males and females, students and employers in vocational education. Grants are also offered to provide funds for teacher-education programs that encourage nontraditional students.

Special activities include workshops called "Tradeswoman" conducted by women already employed in nontraditional occupations. A booklet and slide/tape were completed called "New Approaches to Old Careers." A CETA-funded project, "Work Opportunities for Women" encourages women into nontraditional occupations. Guidelines have been developed for all personnel to follow when purchasing and using textbooks and other instructional materials.

There has been an increase of females in agriculture production, agricultural mechanics, general merchandise, accounting and computing, auto mechanics, carpentry, electricity, drafting, electrical occupations and graphic arts occupations.

There has been an increase of males in associate degree nursing, radiology technology and inhalation therapy.

New Jersey

Incentives to develop, expand and improve vocational education programs to eliminate sex-role stereotyping are provided to local education agencies. For example, fiscal support is offered to eliminate sex bias and stereotyping; inservice programs were given to administrators, teachers, counselors and agency personnel; curriculum guides were revised to be made bias free; special publicity was given to exemplary and model programs.

A project entitled "Overcome Sex-Role Stereotyping in Office Occupations" helps business and office educators teach sex fairness with students. "Electricity/Electronics Curriculum Development," examines career opportunities in the areas of electricity and electronics and includes the development of curriculum resource guides, recruitment brochures and inservice programs.

Enrollments showing an increase in females from 1972 to 1979 were: agriculture occupations, technical occupations and trade and industrial occupations. Males enrolled in increasing numbers in health occupations, occupational home economics, and business and office occupations.

New Mexico

A vocational equity center has been established which addresses educational equity issues for both females and males. Staff provides technical assistance, a resource library, printed and audio-visual materials, program planning assistance, and workshops for personnel from secondary and postsecondary institutions. A filmstrip entitled, "Changing," addresses the myths and stereotypes which prevent students from enrolling in nontraditional vocational training.

A statewide senior student essay contest. "How Stereotyping Can Affect My Career Choice," honored two students with plaques and $50 savings bonds. A women's resource center was funded in Albuquerque to develop and provide programs to assist clients through a series of life changes that occur from youth to adulthood.

The State Sex Equity Advisory Committee in conjunction with the state coordinator compiled and cataloged proposals submitted in other states for a Sex Equity Proposals Exchange project.

There has been an increase in female enrollment in agriculture production, ornamental horticulture, mechanical occupations, construction and maintenance trades, petroleum, electronic technology, water and wastewater technology over a three-year period.

There has been an increase in male enrollment in health occupations, consumer and homemaking education and office occupations.

New York

A six credit university inservice course on sex equity for vocational educators trained over 225 vocational educators as change agents for facilitating sex equity. That group made over 56,000 contacts with students, teachers, and parents providing information on sex equity in vocational programs.

Two films developed in the sex equity coordinator's office received special recognition at a film festival. "Turning Points", is a documentary film depicting problems and experiences of women pursuing careers. "Men's Lives" concerns changing masculine roles.

A job network information service was established to find qualified nontraditional teachers and administrators. The service lists administrative job openings in LEA's and in state departments. Over 380 jobs had been advertised through early 1981 and a pool of over 500 qualified applicants is maintained.

There was an increase of 20 percent of women enrolled in agriculture programs from 1976–79; an increase of women in technical areas of 11 percent; and an increase in trades and industrial programs of 13 percent.

Men increased enrollment by 18 percent in home economics and by 2 percent in business and office programs.

North Carolina

Certificates of award and media coverage were given to 15 local education agencies doing an exemplary job of sex equity plans, inservice workshops and nontraditional enrollment changes. Special institutes trained 48 vocational educators to conduct local sex equity workshops. Plans to promote sex equity were a priority for 8 regional workshops.

A special project assessed business and industry's efforts and needs to provide opportunities for nontraditional employees. Newsletters on sex equity issues are disseminated quarterly. Information on women eligible to be vocational administrators has been made available for those interested.

"Work Options for Women" and "Wider Opportunities for Women" were programs that provided support services for women in nontraditional vocational areas and gave the women hands-on experience in 8 different trades.

Student organizations are promoting sex equity by encouraging both sexes to run for club office; stressing that membership is open to all vocational students; and by publicizing club activities with sex-fair pictures, posters and slides.

Female enrollments have increased in 18 secondary programs including forestry, appliance repair, millwright, diesel mechanics, and barbering. Post-secondary female enrollments have increased in 17 nontraditional programs. Nontraditional male enrollments have increased in 19 secondary areas in health occupations, consumer and homemaking and business occupations. Post-secondary male enrollments have increased in 10 nontraditional areas.

North Dakota

Mini grants were available to recipients of Federal vocational funds that resulted in several model programs and projects. Equity workshops were done in eight regions throughout the state. Each workshop participant was committed to implementing a sex equity related activity in his/her own school. Following regional workshops, there were approximately 4,500 hours of inservice activities on sex equity in local school districts.

Filmstrips on equal access and opportunities were done for student organizations, special brochures were written on nontraditional courses and programs for women, and a Title IX brochure was cooperatively done by the Governor's Commission on the Status of Women and the Department of Public Instruction.

Nontraditional enrollment increases over a four-year period show a 9 percent increase of males in home economics programs; a 2 percent increase in number of males in office education; a 6 percent increase in females in agriculure; a 4 percent increase in females in technical education; and a 2 percent increase in trade and industrial education.

Ohio

Over 40 sex equity grants were awarded to LEA's to develop action plans and sex-fair materials. Three grants were given for graduae study in sex equity in vocational education. Twenty-six displaced homemaker centers were funded during 1981 with cooperative dollars from the Ohio Department of Education and CETA.

Each vocation education planning district and each vocational education service area has a sex equity plan of action that includes assurances on nine goals to achieve sex equity.

Projects have included a model for summer school experiences in nontraditional programs; a pre-vocational curriculum model to eliminate sex barriers in career decisionmaking; a recruitment, retention and placement model; and a newsletter dissemination service for sex equity information reaches 10,000 state educators. In 1979, 43 percent of all women enrolled in vocational education were in short-term adult courses.

From 1972 to 1979, the percent of women in nontraditional programs doubled from 5.5 percent to 10.8 percent. In nontraditional agriculture and distributive education programs, the percent nearly tripled. Women's enrollment has appreciably increased in all areas, particularly in 11 technical programs and 16 trade and industrial programs. Men's enrollment has increased in 11 nontraditional programs. Included are floristry, home economics useful, bank teller and general office programs.

Oklahoma

A model program for adult students provided exploratory work experiences in nontraditional occupations, supported these students to get into nontraditional training progams, and provided placement services. There were 275 students involved. Employers in the area were contacted for prospective work experience stations.

Child-care referral services are provided by the State Department of Vocational-Technical Education and in area vocation schools. The State Advisory Council on Vocational Education funded "Sex Bias Barriers to Vocational Education Enrollment," a research project. A member of the vocational education equity staff serves on a state department of vocational-technical education salary review committee. "Futures Unlimited" is a slide/tape program for students, staff and community groups.

Services for displaced homemakers show that 43 percent of those going through one program were placed in jobs. Three rural displaced homemaker programs are cooperatively provided with funds from the State Department of Vocational-Technical Education, the State Department of Economic and Community Affairs and the regional office of the Department of Labor.

Nontraditional enrollments for females show an increase in 24 programs including 5 in agriculture, transportation, appliance repair, sheet metal, welding and small engine repair. There was an increase in 10 nontraditional programs for males with the major increases in the health occupations.

Oregon

A telephone education program was provided for displaced homemakers, single parents, part-time workers, and handicapped persons who need to improve their job skills. Lessons in business, math, and basic skills were produced on cassett tapes to be played over the telephone. Each student had an accompanying workbook. Instructors visited the students homes at least every two weeks to monitor programs and administer tests.

"Balancing Vocational Opportunities" included an attitudinal survey toward sex-role stereotyping, provided workshops, developed materials, and trained a cadre of vocational educators in the elimination of sex bias. Female enrollments increased in marketing, metals, drafting, graphics and forestry and male enrollments increased in secretarial and child care clusters as a result of the project.

Special projects provide exploratory experiences, support services, and cooperative work experiences for women in nontraditional vocational-technical areas. Other programs work with college and community resources to find jobs in private industry for women who are economically disadvantaged, unemployed and underemployed. There were 8 displaced homemaker projects, 13 support services for women, and 13 nontraditional roles and re-entry programs. The Department of Labor, CETA, Women's Educational Equity Act, National Science Foundation, Urban League, Kellogg Foundation, Associated General Contractors, and the State Highway Department all participated in funding sex equity projects.

Pennsylvania

Schools are encouraged to involve parents and the community in achieving sex equity. The Department of Education endorses the principle of sex equity nd encourages schools to educate students in a sex-fair manner.

Projects include a directory of nontraditional workers, a sex-fair career day guide, implementation of sex-fair career days, and a statewide sex-fair counseling workshop. "Vocational Education for a Changing World" is a multi-media presentation for community and school organizations on the changing roles of men and women in the workforce. The intent is to assist children base their career decisions on interest and ability and to promote nontraditional careers.

There has been an increase in female enrollments in 51 programs considered nontraditional for that sex with the greatest number in 30 trade and industrial areas. Nontraditional enrollments for men have increased in the areas of dental assisting, dental lab technician, medical lab assistant, medical assistant, clothing and textiles, childcare and guidance, clothing managment and general clerical.

Puerto Rico

Five regional supervisors were trained to give technical assistance to all vocational education personnel to place women in nontraditional programs. Goals were to increase the enrollment of women by 1 percent in agriculture, 32 percent in technical education, 2 percent in industrial arts, and 3 percent in vocational industrial occupations. Male enrollments are projected to increase 1 percent in health occupations, 2 percent in office occupations, and 2 percent in consumer education.

Sex equity workshops are developed with technical teaching materials in the Spanish language. School directors are promoting women in nontraditional vocational training through the media, workshops, and staff development.

Women's enrollment in nontraditional programs has increased from 1977-79 in two agriculture programs, three distributive education programs, seven technical education programs and nine trade and industrial programs. Men's enrollment over that same period in nontraditional programs increased in one health occupation, four consumer and homemaking programs and three office occupations programs.

The overall enrollments of female by division for this period were: increases in agriculture from 4 percent to 10 percent; increases in trade and industry from 23 percent to 26 percent; increases in technical education from 8 percent to 18 percent. Male enrollments in home economics increased from 14 percent to 19 percent and in health occupations from 11 percent to 14 percent.

Rhode Island

Rhode Island College has a three-credit course on the exploration of sex roles in vocational education that is recommended for all students majoring in vocational education. A pilot project to acquaint parents with issues related to sex equity was conducted. Its aim was to encourage parents to help their children explore nontraditional vocational opportunities.

A joint project between the Bureau of Vocational-Technical Education and the Associated General Contractors of Rhode Island resulted in a job information fair to acquaint women with job and apprenticeship opportunities in construction. Approximately 350 women attended.

There have been increased female enrollments in agriculture production, accounting and computer occupations, environmental control technology, machine shop, law enforcement, electronic technology, fire and fire safety technology.

There have been increased male enrollments in horticulture, nurse assistant, homemaking, dental assistant, medical lab assistant, stenography, practical nurse, and secretarial occupations.

South Carolina

Several special projects were devised to encourage women into nontraditional programs. "Entrys" (Engineering, Technology Resources for Young Female Students), was designed to reach female high school students who have an interest in math and science. "Exploratory Assistance Programs for Females in Welding" was designed to provide occupational information to females regarding opportunities in the welding trades.

Public service announcements went to 12 major TV stations and nearly $15,000 worth of free air time was granted.

There has been an 8% increase in female enrollment in Agriculture, 2% in T&I, and 6% in Industrial Arts. An increase of enrollment for males shows 5% in consumer and homemaking, 4% in occupational homemaking, and 3% in business and office occupations.

South Dakota

A film entitled "Freedom Through Access" was produced and used extensively in special mini-conferences. Access is an acronym for "Ascertaining Career Choices While Liminating Sex Stereotypes." A youth cartoon contest, "Sex Equity in Today's Life" was coordinated by the Sex Equity Coordinator and vocational youth groups. Winning cartoons will be reprinted and distributed as posters around the state.

Programs with increased female enrollments are agriculture production, agricultural mechanics, machine shop, radio and TV production, auto parts management, and drafting.

Males are enrolling in nurse assistant, consumer and homemaking, care and guidance of children, office machines, clerical occupations, and dental lab technology.

Tennessee

The Sex Equity Coordinator works with the State Advisory Council in all areas of vocational education. The coordinator also cooperates with the presidents of technical institutes, the Commission on the Status of Women, the NAACP and the YMCA.

Curriculum materials were updated to eliminate references to sex-role portrayals in Ornamental Horticulture, Marketing I, Practical Nursing, Family Living, Transportation, Business Data Processing and Automotive Mechanics.

All vocational programs were reviewed for progress in sex equity. Written responses and recommendations were made for 477 secondary programs, 47 adult programs, and 30 postsecondary programs. Approximately 60,000 students were represented.

Enrollments show increases in females nontraditional students in agriculture, industrial arts, technical (48%), and trade and industrial education. Male enrollments have increased in health occupations, occupational homemaking and office occupations.

Texas

The Texas Education Agency funded a video-cassette program named "Break Out" as a recruitment tool to bring nontraditional role models to students. A study entitled "An Analysis of Problems as Perceived by Male Students in Vocational Homemaking," will result in improved teaching techniques or curriculum development.

Apprenticeship advisory board members produced posters of women in nontraditional roles as a means of recruiting more women in apprenticeship programs. Over 500 posters were distributed to vocational counselors and placement offices.

Sex-fair brochures on secondary vocational education programs were designed and used for student recruitment by local school districts. Forty-six thousand brochures have been printed and disseminated to both female and male students.

There has been a 2% increase of males in health occupations and a 7% increase of males in homemaking education. Since 1976, female participation in nontraditional industrial education has grown from 2% to 16%.

Utah

The sex equity coordinator reviews all guidelines, checklists and evaluation instruments used by the division of vocational education for possible bias and stereotyping. A nondiscrimination statement is included in all curriculum materials and documents disseminated through the vocational education division.

A four-year project on vocational opportunities through equity (Project VOTE) consists of strategies to assist vocational educators in decreasing sex stereotyping in courses and on student career selection. Twenty local agencies are participating in the four stages of development, field testing, implementation and dissemination. Learning modules being tested are: (1) Support Yourself, (2) Career Conversation, (3) Looking Out for Life, (4) Equity Ideas, and (5) Opening Doors to Nontraditional Employment.

Leadership training in sex equity is provided to vocational directors and at least one person from each local agency who will serve as liaison to the director on equity issues.

Vermont

A TV program called "Across the Fence" highlights special projects which are being offered to overcome sex stereotyping. Newspaper coverage is given to exceptional programs and letters of commendation are sent to school districts demonstrating exceptional sex equity efforts.

Projects have been funded to orient high school personnel to opportunities for women in technical careers. Workshops have been designed to deal with student attitudes. A media presentation was developed to encourage students to explore nontraditional career options.

There has been an increase in female enrollments over a three-year period in agriculture production, ornamental horticulture, accounting and computing occupations, commercial art occupations, graphics art occupations and quantity foods occupations. There have been increased male enrollments inpractical nursing, and care and guidance of children.

Virginia

Three projects for displaced homemakers were funded by the vocational sex equity office. One was a workshop to prepare vocational home economics teachers with the skills needed to work with displaced homemakers. A second project provided internships and two seminars to prepare displaced homemakers for entry into the job market. The third was a project called "Preparation for Employment for Displaced Homemakers" in which 20 persons were provided job search skills and individual counseling.

A slide/tape presentation for use in recruiting students, "Business and Office Education Recruitment Materials" was developed and field tested in August, 1980. "Encouraging Sex Equity in Home Economics" was done to attract males into home economics programs.

Virginia's program enrollments for 1978–79 show more women entering programs in agriculture, industrial arts and trade and industrial education. Men are increasing in numbers in health occupations and home economics.

Washington

The State Board for Community College Education elected to provide 3% of their basic grant for displaced homemaker programs and 2% for support services for women for three years. As a result, there are special services, programs or centers for women and displaced homemakers in 27 community colleges.

Several sex equity oriented program improvement and disadvantaged projects were funded through the Research Coordinating Unit. "New Career Horizons" is a rural outreach program that provides problem solving, job training and job placement to unemployed, disadvantaged, single heads of households. A nontraditional career information and counseling center provides recruitment, referral, training and placement of men and women in nontraditional occupations.

"Dial Women" is a toll-free telephone service for rural women needing advice and assistance in finding vocational training and job opportunities. Another project provides job-seeking skills for victims of domestic violence. A three-day conference for 11 Western states for women in fire service was sponsored by the State Commission for Vocational Education and the U.S. Fire Administration.

Male enrollments in nontraditional vocational programs have increased in 18 areas and female enrollments have increased in 51 programs including 23 in trade and industrial education programs.

West Virginia

Dollars were provided for grants to support activities to overcome sex bias and sex stereotyping and for support services for women. Priorities of those projects were nontraditional recruiting programs, sex-fair materials development, attitudes toward nontraditional occupations, and vocational exploration in nontraditional areas.

One project trained counselors to assist girls in choosing career and a local project helped counselors, administrators and teachers overcome sex stereotyping. Two career awareness programs for women presented a realistic view of nontraditional occupations. A directory of workers employed in nontraditional occupations was developed.

Each local agency was required to develop and implement a plan for the elimination of sex bias and stereotyping in vocational education. The local plan also met the federal guidelines for having appropriate representation of males, females, minorities and handicapped persons on advisory councils.

Reports indicate an increase in nontraditional female enrollments in 11 programs and an increase in male nontraditional enrollments in 9 programs.

Wisconsin

An incentive system provided extra reimbursement points to school districts that did a sex equity needs assessment, developed and implemented an action plan, and provided a related staff training program. Over half of the 286 secondary school districts participated. Postsecondary funding incentives encouraged women's centers, special services for nontraditional students, and displaced homemaker services.

Among special activities were an awareness campaign for parents to encourage children to consider nontraditional vocational programs; handbooks for promoting sex equity a booklet highlighting twelve nontraditional students; materials used by counselors, teachers, community organizations, and CETA program directors; and needs assessment instruments and plans for postsecondary districts to develop displaced homemaker service centers.

The Governor proclaimed "Pioneering Through Vocational Education Month" in October of 1979 and special efforts were made to encourage nontraditional enrollments. The Resource Center on Sex Equity trained 35 vocational educators to serve their local regions. A bimonthly equity newsletter and a monthly job opportunities bulletin were part of the sex equity coordinator's tasks.

The nontraditional enrollment summary shows an increase of males in eight home economics areas and five business occupational programs. There were significant increases of women in agriculture, industrial education, graphic arts, plastics, and construction.

Wyoming

Special efforts were made to help vocational student organizations understand equal vocational education opportunities. The state awarded five grants to develop model sex equity programs in local agencies. A videotaped program on women in nontraditional roles was created and an A-V recruitment package provided encouragement for women in construction technology.

A survey was done to discover barriers to vocational education services and employment in rural parts of the state and included a needs assessment in a six-county area. Another project provides guidance in making career decisions and employability skills to single heads of households, persons who are currently homemakers seeking employment, part-time workers who wish to secure full-time jobs, and displaced homemakers.

Two workshops per year are provided for state staff and university staff who use materials for eliminating sex bias. Four regional workshops are provided each year for teachers, administrators, and parents on eliminating sex bias.

Mr. **Miller**. Thank you.

Let me ask you, if you take the collective testimony you have presented to the committee and Ms. Evans, you said educators are well intentioned people but they needed guidance where to go, what is it in the law that prevents you from doing what the testimony suggests desperately needs to be done? Anybody can respond. The overall figures by themselves basically paint the same picture that was painted, basically. The percentages change. The solution numbers are disgraceful.

It paints the same picture that caused Ms. Chisholm and me to raise this issue in 1975. I am at a loss when we were constantly told that only $10 out of $100 comes from the Federal level although I think the earlier testimony suggests that if you really look at all of the funding, there will be substantially more there, I am at a loss; what in the Federal law prevents State and local agencies from taking the necessary action to achieve equity? What would you have us change? The word "require" is in many of the pieces of testimony, the mandate, which obviously the second half of mandate is funding. That's a separate issue. What is it that is the prohibition to achieving the equity that I suspect almost every policy maker would suggest is just a matter of fact, that's the way it ought to be?

With some minor exceptions, I can give you a list of people in the Congress who suggest that that's not the way it ought to be. I wonder what it is that is the stumbling block? I believe the stumbling block is the vocational system in this country. You keep talking to me about rescuing people from the system that if left to its own inertia would devour them. Devour them today just as it devoured them in 1975. It would either devour them in the sense that it is leading them to a dead end job, a low paying job, or it presents such barriers to entering because it doesn't offer an opportunity to a displaced homemaker, to women in special circumstances, that even the opportunity of a low paying job is denied.

I don't know what I can do to change that system.

STATEMENT OF EUGENE LEHRMANN, PAST PRESIDENT, AMERICAN VOCATIONAL ASSOCIATION

Dr. LEHRMANN. Congressman, I am Eugene Lehrmann, past president of the American Vocational Association. When you talk about what is there in the law that should be changed, I know the law gives us direction.

Mr. MILLER. The exact question is what is it in the law that prohibits you from doing what the testimony has said this morning, has said should be done, assuming they are all right-thinking people?

Dr. LEHRMANN. I'd have to say that the law doesn't preclude us from doing the things that all of us want to have done. I think the people that are here to testify, I came from Wisconsin today to be here to respond, because I believe that the law gives us the latitude to get these things done.

However, in the process of doing so, it has taken some time to get things in motion. In our statement which in comparison to the rest of States that have testified here, we moved in the direction of making some accomplishments within the system. We have in every one of our secondary districts, women's centers to concentrate on nontraditional enrollment. It is working in that direction. I don't believe it's a limitation within the law.

I think that there are things that must be put in place. Our State, for example, this year, as a result of the initiative started with the 1976 amendments, I'd say, voted $325,000 of Federal funds for displaced homemakers—State funds for displaced homemakers, separate and apart from anything that we have found. It is this kind of initiative that came from the vocational system to help accomplish what we see is a real need.

I think we have to be wisely self-sufficient, regardless of where we are coming from, whether it is within or without of the vocational educational movement. As technology and employment changes, we are going to need all the available human resources we have to get the job done. I believe that you will find vocational educators within the system are willing to respond to this initiative.

I don't think it's the Federal Act. I think the Federal Act has served as an excellent incentive, myself. In our State, we are going to spend next year a little over $1 million at the secondary and post-secondary level in trying to accomplish the purposes set forth in the act. So there has been movement, although I'd be the first to admit, it has been rather slow in getting started.

Ms. Foxx. I think the question is again not the legislation, but the attitudes of people. You talk about making a list of the people in Congress who would favor what we are talking about here.

I think if you look at that time the Congress as a microcosm of the society that we live in and you realize that there is a small group of people here.

But when you look at the fact that there are five female superintendents in the State of California, two female superintendents in the State of North Carolina, then you realize that there is not a lot of support coming from the people who have been in the educational system for so long, who see their positions threatened.

It is absolutely imperative that the legislation be there and that the Federal Government say, "We are not going to put up with this kind of attitude any longer. You just cannot continue in the absence of legislation to continue to discriminate against people on the basis of sex."

I think that is a major part of the problem. You've got to toughen up on what happens in terms of legislation. I don't think the law itself is the problem. It's overcoming those attitudes that have been OK'd for so long.

Ms. Gipson. I think that there is nothing in the legislation that prohibits us doing what we want to do. I believe it is very important to say that in our State, we have looked up and found that vocational educators were in the forefront of doing these things. Much to our surprise and almost to my dismay, we are at the forefront in California to bring about change.

The innovative things are happening through vocational education. We don't want to drop the ball now, because we have left the back of the bus and moved to the driver's seat. We want to keep on driving.

I don't think there is anything that needs to help except continuance of the legislation.

Dr. **Brenner**. You seem to be asking why is there injustice and discrimination in society and what can the Federal Government do about it if there is.

I think we do have some precedence here in the area of civil rights. I think the Civil Rights Act of 1964, the effects were not immediate, perhaps, but over a long period of time, I think that it is true that you can't legislate against discrimination if people want to discriminate.

But you can make it more expensive for them to do that. You can provide the legislative framework for people to resist if they are discriminated against. I think in this particular area, because what we see is that there is not discrimination in access overall, that the sex inequity in vocational education is harder to get at than simply counting the number of bodies.

I do think that in this area, the sex equity provisions have been effective. One may ask wasn't there other legislation that could have covered that, like Title IX. To some extent the answer is yes, it should have, but it didn't. You sometimes need more than one piece of legislation to change something that's very embedded.

I guess I would agree with the other people who have said, "I think we have the right legislation here." But I think that it has to be reinforced again if we expect the progress to continue that has been started on the basis of this legislation.

Mr. **Miller**. Reinforced in what manner?

Dr. **Brenner**. Basically retaining the provisions that are already in the legislation. There are several specific, more specific provisions that I could talk about that I think would be a reinforcement.

If you want to take the model programs area, for example, the legislation currently has in it provisions to provide money to the States to make grants for innovative programs, curriculum development.

The legislation further says that projects which would reduce sex discrimination and sex bias in vocational programs are to be given priority in considering the application for these programs.

In 1978, $64 million was spent for this whole set of programs. $1 million, less than $1 million, was spent on programs to combat sex stereotyping and sex discrimination.

Mr. **Miller**. Why?

Dr. **Brenner**. It seems to me, as I indicated previously, I don't think that the Office of Vocational and Adult Education and the Office of Civil Rights have taken up this legislation as their own and tried to enforce it in State and local areas.

Ms. **Jabonaski**. If I may also respond to that point, it is not that people are not willing and certainly vocational education, as Connie mentioned, in California and New York is in the forefront.

If you were to take a look at education in job, you would find that most of the efforts to increase opportunities, especially for women, have been in the area of vocational education.

That's where the training takes place. That's where the basics are dealt with. There have been some efforts in that area. I think one of the major problems and the problem with the legislation, it is a good piece of legislation, and we want to see it continue.

We need those efforts. It's a problem of priority. What becomes more important and how do you allocate resources to meet what is most important? It takes time to develop the attitudes and to help people across the country, especially in my State, across the State, to see that improving opportunities for women and eliminating barriers is as important as buying new equipment which is also a high priority so that you have equipment to train people on for jobs.

There are *x* number of dollars. Sex equity does not necessarily require tremendous resources. But it does require time and effort and planning and understanding of what the basic problems are, and how you deal with those.

This is one of the reasons we made inservice a high priority. Once that classroom door is closed and that teacher is in there with those kids, that is where the action takes place. Until a teacher knows what treating students on an equal basis is all about, and providing for their needs, it doesn't happen.

You can't legislate. It takes time to develop those expectancies and skills and understandings.

Mr. MILLER. Mr. Erdahl?

Mr. ERDAHL. Thank you very much, Mr. Chairman. I regret that because of some other commitments and phone calls, I haven't been able to listen to all the testimony today. Maybe this is a followup and a bit redundant to the question asked by my colleague from California.

It seems as we look at this whole area in a broad way first off, that the real problem is not necessarily one of access. Maybe that is. But to me, I'm not so bothered by the fact that we have a higher percentage of young ladies involved in home economics and a higher percentage of young men involved in auto mechanics, whatever it might be, as long as the options are there for the young men to get involved in home economics and for the young women to get involved in mechanics, or whatever it might be.

So, the whole situation seems to be, unless I misread it, not really one of access or options, but one of stereotypes, of attitudes in this whole area. Maybe you will elaborate on that.

Why don't you identify yourself again?

Ms. FOXX. I am Virginia Foxx from Banner Elk. I am on the Board of Education in Watauga County.

I think I've an excellent story to tell you to respond to that.

Mr. ERDAHL. Go ahead.

Ms. FOXX. As a member of the board of education, I'm on the curriculum committee for our high school and our elementary school in our county. Last year, we were dealing with preregistration for high school classes.

We came to the area of vocational education. We had 57 people who said they wanted to go into auto mechanics. We could only take 25 students into that class. We were hassling with how are we going to take care of the requests for this class?

The director of vocational education in our county said: "I have looked at the list of students who have preregistered for that class. There are three girls signed up for that class. We can eliminate those. Now, that brings us down to 54."

Mr. ERDAHL. Who was the person that said: "We can eliminate the three girls"?

Ms. Foxx. The director of vocational education in our county. I want to say that I agree with these people. There are lots of people in the area of vocational education who are very, very much in favor of sex equity and who are working very hard in that area.

But there are also some who have very strong stereotypical notions of what people should do, males and females.

And so, here we were, you talk about options, and I think all of us would agree that the major emphasis ought to be on presenting options to students, not requiring females to go into nontraditional jobs, or males to into nontraditional jobs, simply to say "We have done something with this legislation; we have done something in this country."

But I think these young women were going to be dropped from that class without even having the option available to them. I think it's a really serious problem that we are facing.

The other issue about counseling the students early in life to let them know that it is OK to go into nontraditional jobs. I'm not sure that we are doing what needs to be done in the area of occupations because there are still too many people who believe that women shouldn't do this kind of work, and men shouldn't do that kind of work.

So the options are effectively closed to these students because the minds of the people who should be helping them think about those options are closed. I think that's a really serious problem.

Mr. Erdahl. If I could follow up on that, we have a couple of little girls in our family. I think those are attitudes that we as parents or as adults or as a society transmit to children at a very early age.

I think in the schools and the home, if you are going to provide the attitudinal options, if we could use that term, it seems to me we have to be talking to the young girls not only in high school or junior high or grade school, I think you have to talk to them in kindergarten.

We have to see that children and youth know that these options are there. As some of you know, I had the privilege of speaking at the vocational conference in Virginia a couple of weeks ago. At one of the meetings, the person that was picked as the outstanding vocational student from Virginia was a very attractive young lady who was in aircraft mechanics.

Evidently she was going around the State talking in a positive and I think a very effective way about not forcing—I think that's a very key point—not forcing people to choose either traditional or male nontraditional roles.

But to give people the options and the choice, it seems to me it has to be established much earlier than high school.

Ms. Long. I would like to comment. The very fact that you mentioned your children suggests to me an avenue of thought that's really important. I too am a parent.

What every parent wants for his young is the best possible life, it seems to me. While I have always wanted for both my sons and my daughter a productive life, I have not entered ordinarily into counseling the counselors.

That, I truly believe, is an area of real concern. I can remember fighting my educational system very hard on something as simple as a son who has a high IQ who wanted to take a vocational education course, because after all, there is no reason on earth that anyone with and IQ over 125 should be in the metal shop.

I found that reprehensible. I find it also reprehensible, however, when counselors are not well informed about real occupational opportunities I think there is a significant lack across the board in that respect.

For instance, new and emerging occupations are not in fact suggested to others. If you don't know an occupation even exists, you can't direct your life toward those goals. I would hope that in new fields like laser technology, one could make an effort to direct on an equitable basis persons to enter the field, if one could only inform counselors of the very existence of the fields.

I think those are really important questions that perhaps the legislation can look to.

Mr. **Miller**. Let me interrupt. I have a hard time with that. If somebody is counseling my children and Mr. Erdahl's children and your children, at the elementary and secondary level about careers, you tell me that they don't know the availability? That person is incompetent to be a counselor. I can't deal with that at the Federal level. If you think there is resistance to attitudes in this one, if I start firing your local counselors, there will be a hell of a lot more resistance. But I can't deal with that. For me to, for the moment, suggest that I have to pour more money in at the top while I am dealing with a counselor who is not aware of job opportunities in a geographical area or that an industry will take properly trained, qualified women to do what has traditionally been a male job, I am at a loss. I am not sure dissemination of information is going to help that individual. Apparently, they haven't been reading the materials and information they already have.

Ms. **Long**. I think that inertia is one of the things about life that's real. Inertia exists. I do believe that counselors, maybe with good will, are simply—they need to be pushed.

Mr. **Miller**. The road to hell is paved with good intentions.

Ms. **Long**. It seems to me that's what the sex equity coordinators position has done, to push against inertia and to focus on an area. There have been, as a matter of fact, slight improvements.

Mr. **Miller**. My problem is that this country has undergone what many people would consider a major revolution in terms of the role of women in our society, and the expectations, and the rights of all women in our society, and you're telling me that after that event, we still have counselors in the system which suggest they are either ignorant of the facts or they are still swimming against that revolution?

Ms. **Foxx**. I think that's true.

Mr. **Miller**. I'm sure it's true.

I don't think this legislation can do it all. But one of the things that I have heard from vocational counselors is—I am not talking against this legislation. I'm worried that you are worried that this legislation is going to be repealed. We have been through those fights on reconciliation. I am more concerned about the response to the legislation. All the testimony in hell is not going to get Ronald Reagan to pour billions of dollars into the top of this program. I am more concerned about the responsibility and the point that was raised earlier about enforcement. I am not sure I can even enforce a program, if the local educational agency will continue to tolerate people who do not have the basic facts at hand to impart to the students of whom they are the trustees.

Ms. Foxx. If we don't have some undergirding for that, if there isn't that model——

Mr. Miller. Give them Time magazine to read once a week.

Ms. Foxx. I teach marriage and the family and most of my students who are very traditional, you say there has been a revolution in this area and I talk to the women and the men in those classes. They have not yet internalized the revolution. Most of them think that they are going to work a few years and stay at home and take care of their children. Their husbands are going to make enough money to take care of them and they are not going to have to work.

Mr. Miller. When I got married, nobody thought they were going to work a few years. That's a revolution.

Ms. Foxx. But the statistics that show that they are going to work a long time, this is not internalized themselves.

Ms. Gipson. Could I say one thing? I think that there is one thing that I have learned as sex equity coordinator, how to judge change and how to look at change and how long it takes for change to come. I really think in working with the other sex equity coordinators that some States are not at the same spot. I think that some things that we see happening in some States, I have to be honest and say in our State we were there maybe 7 or 8 years ago. We, too, had the problems of access. Yet, we went out this year and asked our students did they have equal access. The overwhelming majority of our students said, "Yes," they felt they could get into any occupational program that they wanted to get into.

But after you do the access, and I really want to say this to Mr. Erdahl as well, after you do the access thing, I think that's the first stage, the inservice training, then you can move to the other things, really looking at getting people employed. But you have to do the access things first. Everything goes in stages.

I think what I want to say most, is we have to give the States, individual States, time to move to where some of the other States are. They can't do that without the legislation.

Mr. Miller. You're not going to get any disagreement on that. At best, the legislation is a floor below which no State will fall. If there is ever a regional program, vocational education is it. That's how the program started. It continues to be a very traditionally regionally oriented program in many parts of the country.

At the same time today, in my other committee, we have the segment of labor and other people who design an economic system who tell people that they must leave those regions to migrate to other regions to take brandnew jobs. I suggest that this program doesn't address itself to that in many instances. That's a regional problem. I'm not sure I can change that from the Federal level.

California may have been there. When you see 60 percent of the money was spent in California, Oregon, and Washington, I suggest that somebody was there and somebody wasn't.

If you're really talking about sex equity, I guess I'd have a hard time, given the testimony we heard some months ago, of suggesting to a woman that she engage in vocational education as we now define it. She has a much better chance at that other job if she goes through the academic programs, breaking them down along their traditional lines that you suggested, why would anybody who was qualified for academic programs take that risk that is there and I am sure continues.

I know it continues but I am not sure that this program, as it is currently constructed, even with the sex equity provisions, is the road to sex equity. I am not sure that this program addresses the occupations of today or tomorrow. But that is a generic defect in the program.

Now, I can show you rich examples of where it does. I can show you rich examples in schools in my own district where with industry and schools that are provided the latest technology and you have a couple of hundred kids involved in it. But on the main point, I am not sure it really does, even with these provisions.

Mr. **Kildee**. Thank you, Mr. Chairman. I apologize for being tardy. I was at an intercommittee markup.

I think the step we took in 1976 was a very important step. I think we have to take at least a second step. I have introduced a bill on counseling in vocational education. I think there is a very close link that if it isn't already there, can be forged between counseling and sex equity. I think that is where we do find a number of problems.

Somebody mentioned perhaps the parents have to counsel the counselors. Well, I think in any profession, we try to enhance the role of those whose roles should be very important, not only in counseling, but in any phases of education. But I think unless the counselors are sensitive to this question of sex equity, we are going to continue to have problems. They are the ones who will be steering them in or steering them away from certain programs. So I'd think that perhaps the bill which I have introduced is looked at by myself and others as a way to forge some links between this counseling element and the sex equity part.

I am reminded of a few years ago, Mr. Erdahl and I have discussed this before. My wife and I were flying with three children down this area of the country. The flight attendant came by and gave my two sons pilot wings and gave my daughter a flight attendant bag. My wife turned to her and said: "Well, she may want the pilot wings." I think the parents not only have to counsel the counselors, but counsel a lot of people with regard to sex stereotypes. But you really think counseling is very important. I think that's a very important portion.

I again, Mr. Chairman, feel that that act in 1976 was only a first stop. You want to see how that is working. The Federal Government still has a very important role. Albeit the present administration is trying to diminish the role of the Federal Government in education, but I think it has an important role to assist those who are working with their children to work with them better.

Thank you very much, Mr. Chairman.

Mr. **Miller**. Mr. Erdahl?

Mr. **Erdahl**. Thank you very much, Mr. Chairman.

Let me follow up on a couple of points. It seems to me a key thing in this whole business is that we have to have a linkage between the traditional academic education and the training with the job later on. We in Government and industry must be able to put this association together and especially, I think, that the concept of sex equity would assure that if a woman goes through training, that she receive equal pay for equal work. That still is not always the case.

Let me move to another area, because I think it is so important and probably in the future will even achieve a greater importance and that is opportunities for the displaced homemaker, the person who had the idea of settling down with the cottage, the kids, and the husband, and the whole bit, and all of a sudden, things change.

Is there an emphasis, for such persons to get some type of training or maybe some kind of as an insurance policy, before the time actually comes when this person is in that situation when they need to go to work? I see several of you are nodding. It came to mind. It seems if we could do that, it would be good for individuals and good for society. Any of you care to respond to that general area?

Ms. **Jabonaski**. I think that that's beginning to happen, that as we are working with secondary students, we are trying to bring to their attention that the world is changing and that the lifestyle that they may have will be quite different than, perhaps, their mothers, or grandmothers, or great grandmothers had, and that they will not be settling into a home, probably, that only 7 percent of the families in this country do have that lifestyle where the mother stays home full time and the father works full time. The children see that as a role model, accept that role model is still important tradition as the American way of life in this country.

We are beginning to see that younger female students are recognizing the fact that they do have to work and they are beginning to plan for those careers. We have done a lot of work in New York on this particular topic. We have worked with young women and young men. We have done some attitude surveys to try to find out what students think about themselves and what may happen in the future. We have found that the young females are beginning to see dual roles, homemaker and career. The young males, however, are still seeing themselves as the sole breadwinner and that the females will be at home. That presents a conflict.

So we have to continue to work on what is going to be realistic in society for both males and females. Until some of those problems are resolved, we are going to continue to have conflict. We think that this is one of the major reasons that so many young people are not marrying as early or are divorcing at a higher rate.

These conflicts are there and no one has helped to train them or to let them understand that it is OK not to be in the home full time and that it is OK to have an alternative lifestyle. All of that area still needs to be addressed.

Ms. **Evans**. One of the areas where that could be considered is in the area of consumer and homemaking. As we have more individuals move into the marketplace, that area has the potential to help them balance worklife and maintenance of the home.

It could be a crucial area that they could make an impact within the area of sex equity.

Ms. **Gipson**. We are looking at the students in agriculture and industrial education who, if they are male, we certainly want them to know that they may have to do some household chores if it takes two people to earn a living or to buy the home.

What we are doing is putting out a brochure to all of our students in secondary education that will be out next month that will talk about displaced homemakers, and their problems, and what happens. And males with single life.

We have taken an affirmative stand to get that information to all of our students, male and female. I think that has to be a part of guidance and counseling, too.

Dr. **Smith**. Reference was made to consumer and homemaking. I would like to go back to a point that Mr. Miller raised about perhaps general inadequacy of vocational education as a career preparation curriculum.

I think that consumer and homemaking program is the extreme example on that. Studies that our commission has sponsored clearly indicate that consumer and homemaking programs certainly do not help young women to increase their earnings in the labor force and indeed, may actually be a detriment to their ability to get good jobs after they leave high school simply because it keeps—time taken the traditional consumer and homemaking courses is time taken away from other general preparation courses.

To my own taste, I would much rather see young men and young women spending the time in school learning the basic reading, writing, computing, and science courses. I think that is the best preparation for work.

Ms. **Jabonaski**. The purpose of consumer and homemaking is not necessarily to prepare someone for a job outside the home, but to deal with those issues which are important for improving the quality of their life.

To deal with what happens outside of the world of work and that other portion of their life, and what has happened in the consumer and homemaking education traditionally, and is beginning to change, but it is certainly not changing at any great rate, is that they have done a tremendous job on teaching women what the homemaking role is all about, but they have neglected teaching men what that role is about.

As you have more women in the labor market, you are going to have more men sharing those responsibilities in the home. It is critical because it takes a look at the total person.

What happens in the family and in your personal life is dealt with in that program area. That is a part of the training to make a total person, not just preparing for the job.

Mr. **Erdahl**. What we have been hearing today is basic; one could say the essence of freedom is to have options. If because of sex, financial situation, because of race, because of geography, a lot of other things, that people don't have full range of options, then these individuals have less of the freedom and the equity that we in this society like to see our citizens have.

You want to add something?

Ms. **Jabonaski**. I think that we have certainly gotten to a point that people do have a wide variety of options. There has been a major revolution. But there is still the problem that not everyone knows what those options are.

In guidance and counseling in our State, if the objective has been on directive, they have achieved that. We review many, many schools and interview hundreds of guidance counselors.

Let me assure you, not to say anything that would be detrimental to the State of New York, that many of those guidance counselors do not know what vocational education is, nor do they talk about it, nor do they counsel students to do anything.

They are there. Sometimes their purpose is not always clear to us, nor is it clear to them. That is a major problem because they are not providing information so that students can make any kind of a choice, so that they know what equal access is all about and what options are actually available to them.

They are not preventing students from going into programs. We have not yet found one counselor that has ever said to a student: "You are a girl, and you can't go into agriculture, mechanics," or "You are a boy; you better not go to home economics."

But they don't tell them anything about any of those programs that are available to them. That is a major problem.

Ms. **Long**. There is a need to look at some historical perspective. We have talked about a revolution several times at this table. But in point of fact, it is a rather short-lived one.

There have been other times in our history in this country where indeed women were involved all across the work force. That existed during both World War I and World War II. Indeed, when that disposable population became unnecessary in the work force, they moved out.

That's what happened when I was going to school in the 1950's. I came from a heritage of Eastern Europeans who were very busy talking about the work force right now in Poland. One of the things I learned from my parents was that indeed, women had to be qualified and men had to be qualified, not only to use their brains, but also to use their hands.

You could never tell when you had to earn a living another way. I think that's an important method that we need to get across to the vocational education establishment. As well as to students, as well as to the Congress of the United States, that we need to have a force prepared to make a living with their brains and with their hands.

Mr. **Erdahl**. Thank you very much. Thank you, Mr. Chairman.

Mr. **Miller**. Thank you. Given your comments about your philosophy about homemaking, do either of you believe that it should still be an earmarked portion of the Federal expenditure for vocational education?

Ms. Smith commented that it did present some barriers to the training for nontraditional jobs. You suggested that this was an important component to training the whole person.

I wondered about your views on continuing to have this $30 million to $40 million that is earmarked for this special provision of education.

Ms. **Jabonaski**. Well, to comment on that, my State would like to have vocational education dollars that they could determine how those moneys would be used. But again, when you look at priorities and trying to decide how that money might be distributed, it makes you wonder whether any of those dollars would go to consumer and homemaking.

Personally, and being a home economist and having spent many years in my field, and having worked with consumer and homemaking provisions in the act before I moved into the sex equity and civil rights world, we have seen tremendous improvements because of the use of those dollars.

We don't put any dollars in New York State into secondary programs. That is a state supported part of vocational education. Our dollars in New York are employed in programs for disadvantaged adults in improving their homemaking skills and the quality of life.

But I would certainly say personally that I would feel very strongly that those dollars should be earmarked for consumer and homemaking, that that might be somewhat difficult than the position of the State, who would like that option, and I think they should have that option to make those decisions.

Mr. **Miller**. It is the earmarking which preserves what you do in New York, or is it New York that chooses to——

Ms. **Jabonaski**. Earmarking has been very important because we have had those moneys and so a lot of things have happened. I think that those programs would still be maintained.

I don't think they would probably be maintained at the same level. But I think there would still be a priority there, whether the moneys were earmarked or not, in my State.

Dr. **Smith**. I think that before the Federal Government should specifically earmark money for a program, there should be a compelling Federal interest, as I think there is, for sex equity coordinators.

I do not think that there is a compelling Federal interest in budget set-aside for consumer and homemaking activities. I think that again, indeed it is a program which many States, I assume all States, would want to continue funding out of their own moneys.

But I think it is frankly silly for the Federal Government to be requiring them to spend a certain amount on that program, possibly to the detriment of other activities that would be more directly related to helping disadvantaged and others to increase their earnings once they leave school.

Ms. **Jabonaski**. One of the recommendations that we did make was the need to continue to support existing programs for the purpose of updating curriculum. As you reported in your data, females are continuing to enroll in consumer and homemaking programs.

It is critical that the curriculum within those programs start to reflect the changing needs of the individual within our communities right now. We have—most of us will be in the work force. Most of us will also have to have the home.

Resources in both of those parts of our lives, the management of those resources, is extremely critical. As young women continue to enter into that consumer homemaking program, that's a very special place where we could seriously give information about adult life, about the work force, about career options, and about looking critically at the manipulation of personal resources so that they can be balanced within a framework of operation.

Mr. Miller. Why don't you do that in the homeroom? Why don't you do that in the classroom where there are men and women sitting together in the classroom, and tell them about the need of having a nice home and about treating one another with dignity, and picking up their clothes and helping out, and doing all those things?

Why is that vocational education? That's education, as best I can tell.

With young, minority females, the chances are they are going to end up with a home where they are the sole support. They have been saying for years they shouldn't be segregated. They are.

Ms. Jabonaski. That is a priority that we have been trying to work on.

Mr. Miller. We can have separate but equal, but we don't even have separate. I just wondered because it seems to me that there is a statement in the earmarking by the Federal Government which suggests to States that if you want to be more aggressive, as my State has in this field or New York has or apparently Washington has in dealing with displaced homemakers or if you want to address some of the problems that were in your New York testimony about the lack of superintendents or what have you, whatever it is you want to do to coordinate this program to achieve the goals that everybody in vocational education has suggested it is just around the corner, it seems to me that we are misleading.

I guess there is some evidence that this money is substantially overmatched with respect to other Federal moneys that flow to vocational education. I think that may be the situation. I may be correct on that. But we segregate these things out into nonvocational and vocational education. I suspect they are educational. If you look at the statistics, the testimony of Dr. Smith and Dr. Brenner, they suggest a much better chance of getting a young woman into law school. If I am waiting for the percentage of change to sweep up women, if I wait for the percentage of change to sweep up women in traditional vocational education be they male or female components or I wait for that change to sweep up into graduate school, she has a chance of getting swept into graduate school.

We certainly know that that is not a dead-end job in most instances. I am trying to—I feel like I am a technician going through and checking all of the soldering points on the circuit here. Somehow, this thing is getting short circuited.

I question—we send you a message a $2.5 million message on sex equity and we send you a $40 million message on home economics. I know what I would do if I were a State. I think that may be the problem or at least part of the problem. Maybe part of the problem is that there is a very clear, mixed message. It is a very political one from this side of the bench, let me tell you, when you start tampering with those.

We go back to Mr. Smith. His wife understood equity. She got $40 million for homemaking. But I am terribly concerned about the achievement of those big swings. Apparently nobody who is alert today will suggest that a woman cannot be an aerospace mechanic, or a phone technician, or a lineman, or a plumber if that is what they choose. But we still have these front-end problems within this system that is called vocational education.

I just think to some extent that there is a mixed message coming from the Congress of the United States about where you put your emphasis because one area is rewarded very heavily. Apparently there is also an obstruction in some instances to accomplishing the others.

Dr. **LEHRMANN**. Congressman Miller——

Mr. **MILLER**. Let me say this: It is also very clear from this testimony and from other testimony that those States that want to stretch out can do so and in fact have shown results in overcoming these barriers that if the State department of education and related agencies decide that it is a goal to address these problems of this segment of their society, they can go far beyond whatever multiplier there is in $2.5 million.

It is in your testimony that you bought an awfully lot more than $50,000 worth of services. I suspect we didn't pay for all of this. If we did, we want to know about it. [Laughter.]

Dr. **LEHRMANN**. I think the message that many States are getting is that you expect a broad-based program, that sex equity is designed to give us some direction in vocational education. I would suggest that vocational education is not as inflexible as it may sound at the surface. One thing being our reporting system which categorizes things in terms of agriculture, for example, when in effect agriculture is made up of a whole series of components. But when it finally comes down to reporting, it is reported as agriculture.

There are business programs in agriculture. There are feed, seed, and fertilizer programs for sales. It is a wide range of mechanic programs and the like. So part of it is the reporting.

But I think the Federal Government does send us a signal in the sense that we want to improve home life in America. We haven't been doing a good job in terms of spreading it out with the male and female enrollments, that is for certain.

I believe that many States, like our State, have been using these resources primarily for disadvantaged people, which I think is an area that needs significant attention. So it is kind of a two-way street. You are giving us some signals to get a job done in the home portion of it and yet, we are responding to another set of signals.

I think by moving as rapidly as we can to developing new programs, meeting the demands of new technology and doing it within geographic requirements that fall upon us with funding at the State and local level.

Mr. **MILLER**. Let me suggest that the study that was referred to earlier by Dr. Brenner, even when you break down within these categories, you still find tremendous stratification by sex. If you break down agriculture into its component parts, there is still a dramatic stratification.

Dr. **LEHRMANN**. By all means. But from a period of 20 years or 15 years ago when all agricultural enrollments were male to a point in our State where we have gone beyond that 20 percent, almost approaches 33 percent of the enrollments being female, that is a significant move. I think in the direction of where you are going now, that is not true in every occupational area, believe me.

We have a long way to go. But as we move to what Congressman Erdahl suggested to an end more closely with employers in terms of their needs and adjust programs as I find happening, for example, in South Carolina and North Carolina at the postsecondary level, particularly where they respond almost immediately to demands of business and industry by customizing programs, that kind of thing is happening all over the Nation.

Now we need the other ingredient. We need to make certain that we open these opportunities to qualified women, give them equal access. Believe me, I am all for that.

If industry and vocational education are wisely selfish, they are going to be interested in it because our secondary enrollments at the present time are declining. We are going to need more workers, particularly in the technical fields. We can only do it by tapping, I think the resources that we are talking about, that unused portion of human resources, the women that are available to come into the job market.

And then those people that we really are not serving effectively, the disadvantaged people who for some reason have not been able to move into our work force, those are the two areas that vocational education has to tackle. We know that the Federal Government has those as priorities.

We need some help in meeting that job. I could tell you about an evaluation I just went through in a large city where they targeted funds at new skill occupational area and did a fine job and have large enrollments. But in that same system, I could find programs that were starving because they were not able to improve their faculty and to get the equipment that was necessary to do a good job.

So we are getting the signals all right. We need help to get the job done. I guess at a time when resources are diminishing, it is going to make it extremely difficult for us to respond to all of these things.

Mr. MILLER. Thank you very much for your testimony.

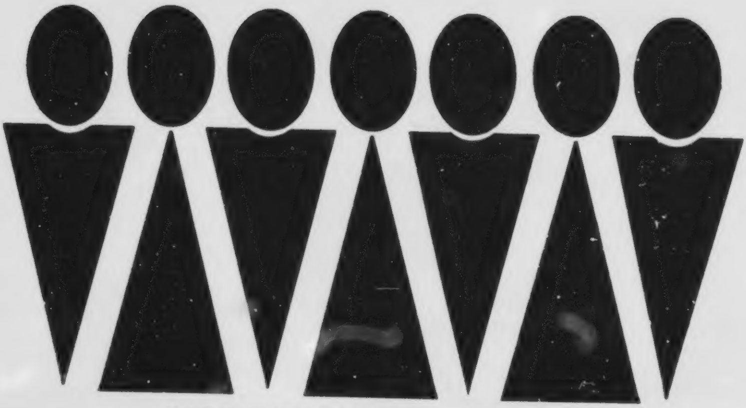
Unless there is something else that you want to add to what has already been said, I thank you for your time and for your testimony that you put together for our benefit. I think it is going to be very helpful as we continue to monitor these programs.

I can assure you in the interest of our chairman that this committee will certainly continue to do that monitoring and hopefully will continue to ask questions and solicit your responses and your help. These hearings are going to continue tomorrow at 9:30.

With that, the committee will stand in recess.

[Whereupon, at 12 noon, the committee recessed subject to call of the Chair.]

[Report of the National Advisory Council on Vocational Education and the National Advisory Council on Women's Educational Programs follow:]



INCREASING SEX EQUITY

THE IMPACT OF THE 1976 VOCATIONAL EDUCATION AMENDMENTS ON SEX EQUITY IN VOCATIONAL EDUCATION

Report of

The National Advisory Council
On Vocational Education

and

The National Advisory Council
On Women's Educational Programs

December, 1980

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PREFACE

The National Advisory Council on Vocational Education and the National Advisory Council on Women's Educational Programs are pleased to present this report of our joint study of the implementation of the sex equity provisions of the 1976 Vocational Education Amendments. The report culminates a fruitful, three year effort of the two Councils to provide both policy and practical support to those responsible for actually carrying out these provisions.

As we submit this report at the close of 1980, the economic implications of much of its contents seem especially compelling. Passage of the 1976 Amendments was spurred in part by testimony regarding the inequality of women's employment patterns. Such concerns led to the special emphasis in the 1976 reauthorization on positive action to eliminate sex bias and stereotyping in order to maximize access to the full benefits of this nation's vocational education system. Now, as another reauthorization approaches, the National Advisory Council on Economic Opportunity reports that the increase of poverty in this country in recent years has been almost entirely among female-headed households. Increasing attention to the economic strength of this country is also leading to a renewed focus on full utilization of the skills of all its citizens. We hope this report will stimulate others to join us in a continuing analysis of these issues, in preparation for the reauthorization, and in the ongoing improvement of sex equity policy and practice in the vocational education system.

We would especially like to acknowledge the two committees which provided invaluable direction to the project which culminated in this report--the NACVE Special Populations Committee, co-chaired by Karen Fenton and Lawrence Hawkins and the NACWEP Federal Policies, Practices, and Programs Committee, chaired by Ellen Hofiman.

Both Councils also extend special thanks to those who testified at the two public hearings conducted for this study, as well as to those countless others who assisted in the organization of the hearings and other phases of the study.

Carol S Gibson

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National Advisory Council
on Vocational Education

SMVance

Susan Margaret Vance, Chair
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EXECUTIVE SUMMARY

The National Advisory Council on Vocational Education and the National Advisory Council on Women's Educational Programs initiated this joint study of the sex equity provisions of the 1976 Vocational Education Amendments to examine whether their implementation had resulted in equitable access to and benefit from the nation's vocational education system by women and men, girls and boys.

The study results will assist the Councils in providing, under their respective legislative mandates, substantive comments and recommendations to the Secretary of Education, the Congress, and the President regarding the upcoming reauthorization of this legislation; they should also prove useful to educators, students, and citizens involved in vocational education.

The various phases of the study focused on such crosscutting issues as funding mechanisms; Federal and state roles; local implementation; special needs of women; state Sex Equity Coordinators; State Plans, Reports, and public hearings; administrators, counselors, and instructors; curricula and texts; and related legislation. The study included a meeting with Sex Equity Coordinators; preliminary interviews and a subsequent forum with interested agencies and organizations to discuss the critical issues; two regional public hearings attended by persons from 21 states; detailed analysis of enrollment data and various state plans and reports from 15 selected states (representing 55% of all vocational enrollments); and a review of recent research relevant to the study. The major findings of the study are summarized below.

Review of Recent Research

- Those schools putting the most effort into various activities to further equity were also those with the highest Non-traditional enrollment of women. Furthermore, the more attention the state paid to what the school was doing, the more the school tended to do.

- There must be considerably more emphasis at all levels on activities designed to overcome inequities in addition to the monitoring and reviewing designed to discover such inequities.

- Successful sex equity programs established a liaison with potential employers, provided participants with support services and orientation to the program, instituted comprehensive evaluation, and employed competent and dedicated staff. More identification and dissemination of such programs is needed.

- There have been significantly greater increases in adult women's enrollment in Non-traditional programs through post-secondary and adult education than in high school women's enrollment in Non-traditional programs.

- As of 1975, the vocational expectations and occupational choices of working class women were conspicuously absent from research literature, despite the fact that most are employed a large part of their lives.

State Plan and Reports

- Most of the selected State Plans contained general statements indicating good intentions without defining specific methods for carrying out these intentions.

- Although the legislation mandates that women knowledgeable in sex equity issues be represented on State Advisory Councils for Vocational Education (SACVEs), and in addition that minority women be represented, information available in state reports made it difficult to discern if these mandates were followed.

- Attempts by most of the states to provide financial incentives for efforts to address sex equity were diverse but relatively minor and often hard to identify within broader projects.

- Comparison of State Plans with Accountability Reports showed that many states did not expend the full $50,000 specifically allocated to the work of the Sex Equity Coordinator and there was no evidence that unexpended balances were carried over to the following years' budgets.

- Although a large number of the states committed funds to displaced homemaker services, there was no evidence that these funds were being used as was legislatively mandated.

- Most states reported that they were monitoring and reviewing for sex equity, but there was little information regarding what happened once plans, proposals, and activities were reviewed.

- Several states reported that they encouraged the entire state staff to become aware of and assume responsibility for sex equity activities, but the specific activities which resulted were not reported.

- Within all of the selected states, the major effort of Sex Equity Coordinators, in addition to monitoring and reviewing, was conducting workshops and seminars and disseminating related information.

- In most cases the State Plan responded to the requirements of the Federal regulations, however, in only a few cases did the state attempt to go further and define its problems or offer a system or method for eliminating sex bias at the local level.

- Many SACVEs or participants at public hearings on State Plans recommended that the state should be funding programs to deal with sex equity issues. Nevertheless, only a few states allocated additional funds for programs, and many states that allocated funds did not expend them.

- States rarely appeared to have been influenced by other recommendations from SACVEs or from the State Plan public hearings.

- The impact of the Bureau of Occupational and Adult Education's Management Evaluation Reviews for Compliance and Quality and staff reports on the State Plans was difficult to assess.

Enrollment Data (1972-1978)

- National enrollments in all occupational training areas increased by 44%, with an influx of over three million additional students. The enrollment increase was greater for women than for men. Women increased by 1.8 million (60% more than their enrollment in 1972), while men increased by 1.4 million (32% more than their enrollment in 1972.)

- While the actual number of women enrolled nationally in Traditional vocational programs increased by 723,700, the percent (i.e., concentration) of all women vocational students who were in Traditional programs decreased by 9 points, from 65% to 56%.

- Women made greater enrollment gains in Mixed programs than in Non-traditional programs. The number of women in Mixed programs increased by 756,500 (up 5%) while the number in Non-traditional programs increased by 312,300 (up 4%).

- Increases in women's enrollment in Non-traditional programs were greater in Technical and in Agricultural programs than in Trade and Industrial programs.

- Percent increases in women's enrollment in Non-traditional Trade and Industrial programs occurred in courses without a strong sex role image, such as drafting, law enforcement, and graphic arts, rather than in courses with a strong male role image such as construction, police science, and machine shop.

- In the 15 states studied, there were greater increases in the percent of women enrolled in Non-traditional programs between 1972 and 1976 than between 1976 and 1978, even considering that the first time period is twice as long as the second.

- The amount and type of detail provided in the Plans of the 15 states regarding implementation of the sex equity provisions varied and sometimes correlated with improved enrollment patterns for women. Greatest increases in enrollment of women in Non-traditional programs occurred in states where planning and monitoring systems were established to meet equity goals, where funds were committed to establish equity programs, and where efforts were made to utilize the entire state staff to address sex equity issues.

Public Hearings

- Negative attitudes about non-traditional training choices and expansion of male/female roles are still prevalent in state agencies, school districts, and communities, and constitute a major barrier to equity.

- More focus is needed on pre-service and in-service training of vocational education staff, especially to get more women into administrative positions, and men and women into non-traditional teaching positions.

- There is a crucial need for adequate, affordable childcare services.

- Transportation and other supportive services are often critical, especially to poor or rural women's participation in a vocational program.

- Witnesses felt that the law is too vague or lenient in the areas of childcare, displaced homemakers, curriculum revision, training and personnel development, guidance and counseling, and assistance to women in preparing for and obtaining non-traditional employment.

- The role of the Sex Equity Coordinator is viewed as essential to the task of achieving equity.
- The across-the-board funding of $50,000 is not sufficient in every state for full-time sex equity personnel and many Coordinators have been unable to secure additional funds to implement programs.
- Sex equity must be viewed as a human issue that affects men as well as women.
- Minority women need supportive services, programs which address their cultural differences, and outreach efforts to change the negative image of vocational education in their communities.
- Attempts by persons outside of the vocational education system to monitor and review State Plans and testify at the mandated public hearings had shown mixed results, and often proved extremely frustrating.
- More sex-fair textbooks and materials infused into the curricula are needed to expand students' views of their potential career options and expose them to women and men in non-traditional jobs.
- Exploratory vocational programs at the junior high school level help students make better career decisions in high school, when peer presure to conform to traditional sex roles is strongest.
- More emphasis on sex equity in postsecondary vocational education is needed to meet the needs of those adult women who make career decisions later in life than men.
- The problem of sexual harassment is increasing as more women enter non-traditional classes.
- Broad legislative coordination with other youth, education, and employment programs is needed in order to achieve sex equity in vocational education.

I. INTRODUCTION

In September 1979 the National Advisory Council on Vocational Education (NACVE) and the National Advisory Council on Women's Educational Programs (NACWEP) initiated a joint study of the impact of the Vocational Education Amendments of 1976 on sex equity. The Advisory Councils' Joint Task Force on Sex Equity, concerned that vocational education be more accessible in order to prepare women and men, girls and boys for employment, sought to examine whether the sex equity mandates of the legislation had resulted in equal access.

The study is timely, since the Federal vocational education legislative agenda calls for Congressional reauthorization activities during the coming year. The two National Advisory Councils, under their respective legislative mandates, are responsible for providing substantive comments and recommendations to the U.S. Department of Education, the Congress, and the President, regarding education programs -- NACVE for vocational education, including the provision of sex equity; NACWEP for education programs affecting women, including vocational education. Both Councils likewise share a particular concern for the needs of racial and ethnic minority women who often suffer double discrimination.

Through this study, the NACVE-NACWEP Joint Task Force on Sex Equity provides the respective Councils with information regarding the effects of the 1976 legislative provisions intended to improve sex equity in vocational education. The information contained in this study report may assist the Councils in determining which sex equity provisions of the legislation should be reauthorized, modified, or deleted, and which new provisions might be added during the reauthorization in order to meet previously unaddressed issues.

The study report may be of interest to others beyond the Councils -- Federal officials concerned with the extent to which the legislation has increased sex equity; state officials seeking a context in which to assess their efforts; local educators and school board members as well as community organizations and individuals concerned with the ability of vocational education to respond to the need for equitable employment preparation.

THE LEGISLATION

The 1976 Vocational Education Amendments (VEA '76) were enacted during the Nation's period of greatest growth in women's employment. The inequity of their employment patterns, however, during this growth period became a major concern.

The U.S. Department of Labor projected that between 1975 and 1990 twelve million women would be added to the American labor force, reaching a total of over 48.5 million women.[1] Statistical analyses of the labor force data indicated that unless major changes occurred to prepare women for entering the work force, they would continue to account for 78% of clerical workers, 62% of service workers, 97% of household workers, and 43% of sales workers. Nearly all secretaries in 1976 were women, as were 86% of file clerks, 85% of elementary school teachers and 97% of nurses.[2] Twenty-five percent of all employed women were employed in only five occupations -- elementary school teachers, typists, waitresses, sales clerks, and secretaries --jobs which tend to pay low wages. Over half of all working women clustered in 17 occupations, compared to 63 occupations for the same percentage of men.[3] This extreme occupational segregation is to a large extent responsible for the continuing wage gap which shows year-round, full-time women workers earning less than 3/5 of similarly employed men. In short, the economic differences were well documented and spurred Congressional interest in using vocational education as a viable resource in overcoming the inequity.

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[1] Bureau of Labor Statistics, U.S. Department of Labor, U.S. Working Women: A Data Book, 1977.

[2] Bureau of Labor Statistics, U.S. Department of Labor, Employment and Earnings, 1976.

[3] Waldman, Elizabeth and McEaddy, Beverly J., "Where Women Work -- An Analysis of Industry and Occupations," Monthly Labor Review, May, 1974.

The numerous programs in vocational education prepare individuals for a wide range of opportunities, many in expanding fields with substantial salary potential. Congress intended the 1976 Amendments to direct efforts toward developing and providing programs to overcome sex bias, sex discrimination and sex stereotyping, and promote equal educational opportunity. The specific provisions are clear:

- Federally assisted state vocational education programs are subject to both Title IX* and VEA '76 mandates to eliminate sex discrimination and stereotyping;
- Advisory Councils on Vocational Education -- National and State -- must have women and minority women members knowledgeable about sex discrimination in employment and training;
- Each state must hire full-time sex equity personnel; duties of that person are clearly outlined and $50,000 of Federal funds are provided for this purpose.
- State Plans must describe in detail how equal access for both sexes to vocational education will be ensured;
- Public hearings on State Plans must be held and involve a wide range of agencies and individuals in developing each state's vocational education goals and programs.
- Displaced homemakers and other special groups -- men and women who are single heads of household, homemakers seeking employment,

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* Title IX of the Education Amendments of 1972 prohibits sex discrimination in any education program or activity receiving Federal financial assistance.

part-time workers seeking full-time jobs, and persons seeking non-traditional jobs -- must have opportunity for program participation;

Support services, day care services, vocational guidance and counseling, as well as grants to overcome sex bias, may be funded.

The 1976 Amendments provided the impetus to create change; this was the first time that the need for equal access to vocational education and job training, particularly for women and girls, had been specifically addressed by any Federal program legislation.

THE POTENTIAL FOR IMPACT

Federal involvement in vocational education as a means of preparing persons for employment began prior to the turn of the century, and was enlarged by the Smith-Hughes Act in 1917, which strengthened state and local vocational education in agriculture, home economics, and trade and industrial training. Subsequent Federal legislation expanded vocational education programs and with the 1961 Manpower Development and Training Act began a Federal-state-local relationship between vocational education and employment and training programs. The Vocational Education Act of 1963 provided substantial increases in Federal appropriations for vocational education and initiated the concept of State Plans, the annual descriptions of programs to be funded through states to local school systems.

While these early Federal involvements had served as incentives to building delivery systems and programs, the 1968 Amendments to the 1963 Act increased attention to the social aspects of education and to specific populations of students. National and State Advisory Councils on Vocational Education were established to provide information to Federal and state legislators and officials on the impact of national priorities to serve persons with academic, socio-economic, and other disadvantages; on programs for persons with handicaps; and on research and development of exemplary and demonstration programs. The Federal legislation provided catalytic funds, yet vocational education is primarily a state and local system -- Federal vocational education expenditures are matched on an average of 1:9 by states and localities.

Related legislation, including the Civil Rights Act, Women's Educational Equity Act, and the Comprehensive Employment and Training Act, has also affected the priorities and programming in vocational education; however, this impact, as well as that of the 1976 Amendments, filters through a structure as complex and varied as the states themselves. Federal funds flow by mandate to a sole state agency and are then allocated by formula to local school districts. While the sole state agency is the fiscal agent, it may or may not have administrative responsibility for operation of all the funded programs. A state may have one or two autonomous administrative systems for operating secondary programs and postsecondary programs. Generally the State Board of Education is designated as the sole state agency, but does not administer the postsecondary system.

Some institutions are fully funded by the state, which may have direct authority for program administration. Locally or regionally controlled systems for offering secondary vocational education include: 1) comprehensive high schools which offer vocational and general academic subjects; 2) a system of specialized vocational high schools offering full-time study of both academic and vocational subjects; and 3) area vocational centers which offer vocational education on a shared time basis to high school students from a particular area of residence. At the postsecondary level, one-year certificates and/or two-year associate degrees are granted by community colleges, technical institutes, and four-year colleges which have vocational or technical programs.

Advice, requirements, and recommendations come to the system not only through the Federal legislation and mandated Councils, but also through school districts, school boards, and trade councils interested in specific programs.

The growing national awareness of the need for training for employment, the increase in women's employment and the related financial inequity, in combination with Federal legislative mandates and incentives, hold the potential for substantial improvement in vocational education. This study considers the extent to which that potential is being achieved.

THE CONDUCT AND ORGANIZATION OF THE STUDY

The National Advisory Council on Women's Educational Programs, mandated to advise the U.S. Department of Education on matters relative to equal education opportunities for women and make appropriate reports to the President and Congress; and the National Advisory Council on Vocational Education, which provides advice to the President, Congress, and the U.S. Department of Education on administration, regulations, and operation of vocational education programs, contracted with the private, non-profit Institute for Women's Concerns to gather information regarding the impact of the 1976 Amendments.

During the planning and initial phases of the study, issues and concerns were raised, including the following:

- Funding. Should sex equity be considered as an area for specific funding or be incorporated into special needs in general (including handicapped, disadvantaged)? Should the provisions which allow states to determine the proportion of dollars to be spent on supportive services and efforts to reduce sex bias and sex stereotyping be more clearly defined? Should women be targeted as a special population?

- Focus on Sex Equity. The current legislation states throughout the need to eliminate sex discrimination, sex bias, and sex stereotyping. Has this approach been effective or should there be a single section on sex equity? The extent to which there is provision for assuring compliance, the results of mandating positions for women on advisory councils, the impact of State Plan public hearings -- all require evaluation of their effectiveness in meeting the legislative intent.

- Special Needs of Women. The legislation focuses upon equity for both sexes. Should special provisions for women, such as day care, be mandated as opposed to discretionary? Would low income women and single heads of household, women re-entering the labor force, and women exploring or enrolled in occupational areas which have not been traditional for their sex benefit from such provisions?

- Postsecondary Education. Is clarification needed regarding the role of the Sex Equity Coordinator, particularly in states where postsecondary vocational education operates as a system separate from the secondary level position of some Coordinators? Does the recent increase in postsecondary enrollments, particularly among adult women, suggest the need for attention to this level comparable to that at the secondary level?

- Sex Equity Coordinators. Is there a need to study the relationship of the Sex Equity Coordinator to the state's administrative structure, to the requirements of related legislation, to the available support systems, and to the monitoring and compliance position and responsibilities required by the Office for Civil Rights?

- Public Hearing. Is the public hearings system working, i.e. having an impact on sex equity issues addressed in the State Plan? What role should the Federal government play in assuring that State Plans reflect public involvement?

- Administrators, Counselors, and Instructors. Are states exercising their option to provide training and retraining for counselors and instructors to increase their knowledge of new occupation choices, changing sex roles, and increasing opportunities for non-traditional employment? Testing and assessment capacities as well as counseling and instructional methodologies are additional areas to be examined.

- **Related Legislation**. The extent to which vocational education addresses sex equity issues may or may not be influenced by the implicit or explicit relationships established with other governmental systems, particularly employment and training (CETA) and the Office for Civil Rights. Have the Federal mandated linkages and overlaps in responsibilities reduced sex discrimination, bias, and stereotyping?

These broad issues are interrelated and cross-cutting; they are the issues considered in the organization and conduct of the study. They provided the focus for analyzing data, testimony, and statements from those who have been involved in attempting to influence the vocational education system and from those interested in insuring that vocational education meets its mandate to promote equity for both sexes.

Two regional hearings, attended by persons from 21 states; a meeting with state Sex Equity Coordinators; preliminary interviews and a subsequent forum with interested agencies, organizations, and individuals to discuss issues critical to legislative consideration; and careful analysis of research and data comprised this study effort.

The report cannot provide answers to all of the kinds of questions emanating from the issues above; however, it does present information on many aspects of these issues which will be useful in determining legislative recommendations and future activities.

FORMAT OF THE REPORT

This report is organized by the major phases of the study:

I. INTRODUCTION

II. ANALYSIS OF STATE REPORTS AND NATIONAL AND STATE ENROLLMENT DATA synthesizes the voluminous material compiled in conducting the study, presents data relevant to issues identified during the course of the project, and summarizes findings from the documentation;

III. **ANALYSIS OF RESEARCH STUDIES**

examines recent research conducted to identify the impact of vocational education on women and men;

IV. **HEARINGS**

describes the two public hearings conducted by the Councils for this study and the content of testimony, and summarizes the issues raised;

V. **APPENDICES**

contains analyses of individual state reports and enrollment data, a matrix of the contents of State Plans, and other relevant details of the study.

II. ANALYSIS OF STATE REPORTS AND NATIONAL AND STATE ENROLLMENT DATA

In conducting this phase of the Councils' study, three sources of information were analyzed:

- The sex equity sections of various plans and reports for the fifteen selected states[1];
- National enrollment data compiled by BOAE for all secondary and postsecondary vocational education students;
- Enrollment data for the fifteen selected states (totalling 55% of all vocational education enrollments).

ANALYSIS AND FINDINGS FROM STATE REPORTS

The 1980 State Plans and 1978 Accountability Reports of all fifteen selected states were reviewed to determine the type and description of activity related to the sex equity provisions of the legislation. Additionally, State Advisory Council on Vocational Education (SACVE) recommendations and State Plan public hearing comments regarding sex equity were reviewed, as well as the responses of the state office of vocational education to such proposals. Bureau of Occupational and Adult Education (BOAE) staff reports on the State Plans were examined for comments dealing with sex equity issues in the selected states as were Management Evaluation Review for Compliance and Equality (MERC/Q) report findings of non-compliance with Federal regulations on sex equity requirements. Finally, State Plans and/or Accountability Reports were reviewed for descriptions of programs and projects funded to eliminate sex bias and for funds allocated and actually expended for sex equity purposes.

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[1] The selected states are: Alabama, California, Florida, Georgia, Idaho, Illinois, New Hampshire, New Mexico, New York, Ohio, Oklahoma, Oregon, Pennsylvania, Texas and Wyoming. This group of states includes: (1) the five states included in all four components of the NIE Vocational Education Study; (2) five states where enrollment of women in Non-traditional courses was above the national average in 1972, five states where percent of women enrolled in Non-traditional training was close to the national average, and five states where Non-tradtional enrollment of women was below the national average; (3) nine states which had had a recent MERC/Q; (4) at least one state from each Federal Region except Region VII; and (5) 55% of all national vocational education enrollments. (See Appendices for detailed state data and information.)

Examination of these documents found the following:

- Most of the selected State Plans contained general statements indicating "good intentions" without defining specific methods for carrying out these intentions. For example, in only 4 of the 15 states were LEAs required to provide assurances that programs will be conducted to reduce discrimination and stereotyping; 7 required a plan to eliminate sex discrimination and sex stereotyping; 4 required active recruitment of men and women for non-traditional programs; 3 required submission of an accountability report on the progress of eliminating sex bias; 3 established goals and timetables for eliminating sex bias; 2 required that all vocational institutions have an affirmative action plan, and only one required dissemination of information on administrative jobs and potential women applicants.

- Although the legislation mandates that women knowledgeable in sex equity issues be represented on State Advisory Councils for Vocational Education, and in addition that minority women be represented, information available in state reports made it difficult to discern if these mandates had been followed. The Councils of the states reviewed had one-third or fewer members who were women, but none had fewer than five. Members' knowledge of sex equity issues could not be determined well because in some state reports the Council members were not listed by name and/or by title or affiliation which might indicate experience or level of involvement in the issue of sex equity. Also, women were not identified in the reports by ethnicity; therefore, it was not possible to determine if minority women were adequately represented on these Councils. For states which did report affiliation, there was a notable absence of women representing community-based organizations.

- Attempts by most of the states to provide financial incentives to address sex equity were diverse but relatively minor and often hard to identify within broader projects. One of the analytic problems was the lack of consistency across the state documents. There was considerable variation in the definition of incentive: Oklahoma used RFPs for model projects, news-releases, films and awards for student exhibitions; Texas gave priority to LEAs which included sex equity as part of their proposal, but sex equity was not a requirement. This latter example placed more responsibility for promoting sex equity in the hands of the LEAs than of the state.

  Alabama allocated $500 for each of 14 model programs in FY 79. Oklahoma allocated $5,000 for model projects, and $5,000 for incentives in FY 80. Ohio planned $42,000 for model projects in FY 78 but spent only $2,000.

  An additional analytic problem was that Federal monies available for program improvements and support services may be used to fund projects for a variety of purposes, to which sex equity was often a mere "add on". It was often virtually impossible to determine from the descriptions of the projects the extent to which the projects or the funding were used for sex equity.

- Comparison of State Plans with Accountability Reports showed that many states did not expend the full $50,000 specifically allocated to work of the Sex Equity Coordinator and there was no evidence that unexpended balances were allocated for the following years' budgets. Only 7 of the 15 states spent their entire $50,000 in 1977-78, according to a special 1980 BOAE report. None of the other 8 states studied carried over their balance into 1978-79. The discrepancies between funds allocated and funds expended warrant considerable follow-up.

- A large number of the states committed funds to displaced homemaker services, yet there was no evidence that these funds were used as was legislatively mandated. In the states reviewed where displaced homemakers were served, services included counseling, job skills training, and/or job placement. Often, however, displaced homemakers were served not because they have been selected as a target population, but because they happened to be found in the population which received such services. Futhermore, although some of the reviewed state budgets identified displaced homemakers as a targeted group, very little money was spent specifically for this purpose. Approximately one-third of the 15 states projected expending substantial funds for displaced homemaker services, but in fact spent very little. For example, Georgia's projected figure was $98,721, New Hampshire's projected figure was $10,000 and no money was reported as actually spent in either case. Alabama and Oregon did not even show displaced homemakers services as a budget item. Of the states which did actually set aside such funds, approximately 12% of the projected amounts were used. For example: Florida planned to spend $61,240, but accounted for an expenditure of only $6,000; Wyoming projected $40,000, actually spent $10,000; New Mexico projected $61,240, actually spent $15,511; and Texas projected spending $200,000, actually spent $5,739.

Another one-third of the states reviewed planned to provide displaced homemaker services, but they were not operational at that time. Nevertheless, some of these states indicated displaced homemakers as a budget item and actually expended funds in this area.

- Most states reported that they were "monitoring and reviewing" for sex equity, but there was little information regarding what happened once plans, proposals, and activities were reviewed. Although 12 of the 15 selected states reviewed their State Plan for sex equity and 12 included a general commitment in their Plan, only 5 required an evaluation component on each program which the states funded to eliminate sex bias. Of the 15 states, 14 reported, with no detailed explanation of the process, that they reviewed the distribution of grants to assure the needs of women were addressed and that the state office reviewed programs for sex bias.

- Several states reported that they encouraged the entire state staff to become aware of and assume responsibility for sex equity activities, but the specific activities which resulted were not reported.

- The major effort, within all of the selected states, of Sex Equity Coordinators, in addition to monitoring and reviewing, was conducting workshops and seminars, and disseminating related information. Additionally, 3 of the 15 states reported that resource packages were developed to assist the local education agencies in implementing in-service training to eliminate sex stereotyping.

- In most cases the State Plan responded to the requirements of the Federal regulations, however, in only a few cases did the state attempt to go further and define its problems or offer a system or method for eliminating sex bias at the local level. Examples of some attempts were: 7 of the 15 states had established a State Advisory Council on Sex Equity and 4 required Local Advisory Councils to include members aware of problems of sex discrimination and bias. While 14 states provided technical assistance to LEAs, only 3 utilized the results of evaluations and action plans in determining state priorities, 1 monitored complaints, and 2 made recommendations to LEAs on affirmative action. While 12 of the states selected for review were involved in developing and/or reviewing curriculum, only 2 provided training for curriculum personnel, 5 provided guidelines for curriculum development and review, and 6 had developed sex-fair materials.

- Many SACVEs or participants at public hearings on State Plans recommended that the state should be funding programs to deal with sex equity issues. Nevertheless, only a few states allocated additional funds for programs, and many states that allocated funds did not expend them. Of the total funds allocated for sex equity programs (in addition to the work of the Coordinator) in the selected 15 states, about 40% were expended. An approximate one-third of the states indicated specifically that money had been allocated for grants but not all of that money was actually spent. For example: Idaho allocated $5,000 for sex equity grants and Oklahoma allocated $20,000 but neither reported expenditure of those funds. Texas indicated that $169,133 (out of $628,059 allocated) was used to fund exemplary and innovative programs. Alabama described funding 14 model programs in vocational education but no funds were allocated specifically for sex equity. On the other hand, New Mexico showed a budget allocation of $22,847 and expended the same amount.

- States rarely appeared to have been influenced by recommendations from SACVEs or from the State Plan public hearings. States generally responded that either: (1) they were already doing what is recommended, (2) they could not carry out the recommendation because it is too expensive, or (3) they did not have the state or Federal legislative mandate to address the issue of the recommendation. This was particulary true in response to recommendations to fund day care services. Many states claimed that they could not afford to carry out such functions, or that educational funds in that state could not be expended for social services.

- The impact of the MERC/Q and the BOAE staff reports was difficult to assess. One problem was that most of the states that had a MERC/Q report were small in population, with no or relatively small investments in sex equity activity other than the mandated functions of the Sex Equity Coordinator. Given the format of the MERC/Q, minimal documented attention by a state to each mandated activity resulted in an absence of findings of non-compliance. The format was less involved with evaluating the quality of the efforts documented by the state and their impact at the local level, than with basic compliance.

  Pennsylvania was one heavily populated state for which a MERC/Q report was available. The MERC/Q contained many negative findings regarding sex equity. The state had, however, allocated additional funds for sex equity activities beyond the mandated functions and had undertaken several projects to achieve equity. The MERC/Q format did not accomodate analysis of this additional effort. Additionally, the MERC/Qs were consistent in the questions which were asked of a state but inconsistent in the evidence of compliance which was found acceptable.

  On the other hand, BOAE staff reports did not consistently ask the same questions of all the states, but the comments they did provide tended to address substantive and qualitative issues. Both the MERC/Qs and the BOAE reports require improved performance standards if they are to serve better their intended purposes, including the achievement of sex equity.

ANALYSIS AND FINDINGS FROM NATIONAL ENROLLMENT DATA

The vocational education enrollment data compiled by the Bureau of Occupational and Adult Education between 1972 and 1978 were analyzed for this study. These years were selected to provide comparable data for the years immediately prior and subsequent to the enactment of the

Education Amendments of 1976.[2] All national enrollment data combine secondary and postsecondary statistics; however, data for the Health and the Technical training area can be considered as representative primarily of postsecondary enrollment data.

For this analysis, a baseline of 1972 enrollments of women students was used to develop categories of Traditional program enrollment, Mixed program enrollment, and Non-traditional program enrollment.[3] (See Appendices for a list of programs classified in each of these categories.)

Analysis of national enrollment data, for secondary and postsecondary students combined, resulted in the following findings:

- Between 1972 and 1978 enrollments in all occupational training areas increased by 44%, with an influx of over three million additional students into vocational education; the enrollment increase was greater for women than for men. Between 1972 and 1978 the enrollment of women in vocational education increased by 1.8 million (60% more than their enrollment in 1972). On the other hand, the enrollment of men in vocational education increased by 1.4 million (32% more than their enrollment in 1972.)

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[2] National data for 1979 (1978-79 school year) were not available at the time the analysis was conducted. Additionally, sex designations on enrollment were not collected by BOAE for the years 1973, 1974, and only partial data is available for 1975. In this study, 1976 data for California were obtained from the state's vocational education agency because such data were not included in the BOAE statistical report. The 1978 data reflect one year of implementation of the '76 Amendments.

[3] In Traditional programs women comprise over 75% of enrollment; Mixed programs are defined as those in which women comprise 25.1 to 75% of the enrollment; Non-traditional programs are those in which women comprise 25% or less of students enrolled. These same catagories when applied to enrollment of men can be developed to show Traditional, Mixed, and Non-traditional programs for them as well. Thus a program classified in 1972 as Traditional for women would be Non-traditional for male enrollees. Once a program is categorized based on 1972 enrollment, the designation is held constant for purposes of comparison.

- There was considerable variation in the extent to which the increased numbers of students were distributed across the seven occupational training areas and among the categories of Traditional, Mixed, and Non-traditional. For example, in 1972 49% of men students in vocational education were enrolled in Trade and Industrial programs, compared to 51% in 1978. In 1972, 60% of women enrolled in gainful occupational training were participating in Business and Office programs, compared with only 53% of women in 1978. In short, the concentration of men in Trade and Industrial programs (which has traditionally enrolled the largest percentage of men) has increased; the concentration of women in Business and Office programs (which has traditionally enrolled the largest percentage of women students preparing for gainful employment) has decreased.

This later finding above indicates that not only have there been marked changes in the types of programs in which women enroll (increasingly moving to selection of Mixed and Non-traditional programs), but also that such changes are especially significant because of the large increase in actual numbers of women in vocational education. The following analysis, comparing numbers of men and women with the percentages of their participation in Traditional, Mixed and Non-traditional programs, amplifies this point:

> Traditional Programs. The increase of women's enrollment in programs Traditional for women was 723,700, between 1972 and 1978, and men's was 145,400. In 1972, 65% of all women students were enrolled in Traditional programs, this dropped to 60% in 1976 and further to 56% in 1978. The enrollment of men in programs Traditional for women increased by only 1% between 1972 and 1978.
>
> It is important to recognize that the percentage decrease of women enrolled in programs Traditional for women is

not a decrease in the number of women, but rather a decrease in the percent of all women vocational education students who enrolled in Traditional programs, i.e., the concentration of women in Traditional programs has been reduced.

Mixed Programs. The increase of women in Mixed programs between 1972 and 1978, 756,500, was much greater than the increase of men, 443,200. The percentage of women in Mixed training rose 5 points from 29% to 34% while that of men rose only 3 points from 20% to 23%.

Non-Traditional Programs. The increase between 1972 and 1978 of women's enrollment in programs Non-traditional for women, 312,300, was much greater than men's increase, 145,400, in programs Traditional for women. The percentage of women rose from 6% in 1972 to 10% in 1978. The increase of men's enrollment between 1972 and 1978 in programs Non-traditional for women, 806,800, was the largest rise in any category, but the percentage of men dropped 4 points from 73% to 69%.

The above data indicate that although there was an increase of women participating in programs Non-traditional for women, even greater numbers of women enrolled in Mixed programs. Similarly, while there was a slight increase in the numbers of men enrolling in programs which have been Traditional for women, men had a greater enrollment increase in the Mixed programs, and made the greatest enrollment increase in programs Traditional for men.

Within the increase of women in Non-traditional programs, several other trends exist. First, examination of the occupational training areas indicates that women's increased enrollment in Non-traditional programs has been greater in Technical and in Agriculture programs than in Trade and Industrial, during the period 1972-78. Second, although the national enrollment data in this study combine secondary and postsecondary vocational education, previous studies have found that there have been significantly greater increases in adult women's enrollment in Non-traditional programs through postsecondary and adult education than in high school women's enrollment in Non-traditional programs.[4] Third, in Trade and Industrial programs that are Non-traditional for women, their enrollment percent increases were in courses without a strong sex role image, such as drafting, law enforcement (as opposed to police science) and graphic arts; rather than in courses that have a strong male role image such as construction, auto mechanics or machine shop. Fourth, there have been increases in actual numbers but not percent of women enrolled in courses that have a practical or hobby connotation, as opposed to one of preparation for employment (e.g. auto mechanics and woodworking for women or consumer and homemaking for men.)

ANALYSIS AND FINDINGS FROM SELECTED STATE ENROLLMENT DATA

The appendices to this study contain tables of the percentage of women enrolled by Traditional, Mixed, and Non-traditional categories for the years of 1972, 1976, and 1978, within the seven occupational training areas -- Agricultural, Technical, Trade and Industrial, Business and Office, Distributive, Health, and Consumer and Home Economics (Gainful and Non-gainful) -- for each of the 15 selected states, as well as the national percentages. The appendices also contain narrative analyses of these data incorporating enrollment change in the detailed programs where such changes have contributed to the enrollment pattern in the overall training area. These analyses of the fifteen states and the supporting data of related appendices resulted in the following findings:

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[4] Women in Nontraditional Training in Secondary Education, Rj Associates. Arlington, VA, 1978.

A Study of the Factors Influencing the Participation of Women in Nontraditional Occupations in Postsecondary Area Vocational Training Schools, Rj Associates. Arlington, VA, 1977.

- There were substantially greater increases in the percent of women enrolling in Non-traditional programs between 1972 and 1976 than between 1976 and 1978, even considering that the second time period is only half as long as the first.

- Most of the increases in women's enrollment in Non-traditional programs have occurred in Agricultural programs, excluding Agricultural Mechanics, and in the Trade and Industrial programs without a strong sex role image. Even in California which had the greatest increases in the percent of women students enrolled in Non-traditional programs, the increase of women in courses with a strong male role image was still relatively small.

- Although there was a substantial increase between 1972 and 1978 in the percent of women enrolled in Non-traditional Technical programs, the rate of increase leveled off after 1976 in some of the states, and in some cases decreased by 1978.

- A total of 8 of the 15 selected states had increases of less than the national gain (4.1%) of women enrolled in Non-traditional Trade and Industrial programs between 1972 and 1978. Of those 8 states, 6 remained below the national average of women in Non-traditional T&I programs in 1978: Alabama, Georgia, Idaho, New Hampshire, New Mexico, and Ohio. The other 2 states had only minor increases in percent of women enrolled in Non-traditional T&I programs but remained slightly above the national average in 1978: Florida and Oklahoma. Two states had substantial increases in the percent of women enrolled in Non-traditional T&I programs, but continued in 1978 to fall below the national average: Pennsylvania and Texas. Oregon data indicated no increases (-0.3%); however, in 1978 the state was still above the national average percent of women enrolled in Non-traditional T&I programs. New York increased 7.2% between 1972 and 1976; however, the state data reflected a substantial decrease, falling below the national average, by 1978.[5] Only 3 of the 15 states studied reported marked increases in percent of women enrolled in Non-traditional T&I programs and were above the national average in 1978: Califorinia, Illinois, and Wyoming.

Commentary

Based upon the data and information compiled during the conduct of this phase of the study, several points appear appropriate for additional comment and attention. The two most important changes for women in vocational education have been:

- The rapid expansion in enrollment of women between 1972 and 1978;
- The shift of women's concentration from Traditional programs to Mixed programs. Although progress was made in the increased enrollment of women in Non-traditional programs, increases were comparatively slight -- the progress has been slow.

There was not necessarily a correlation in the states between an increase in Non-traditional enrollment by women and the sex equity content of the State Plans and Reports. Some states detailing sex equity plans did not show enrollment changes; others with little specificity did have enrollment changes. Where State Plans required goals and timetables, plans from the LEAs for increasing sex equity, and specific assurances from the LEAs that such plans will be achieved, there appears to have been a concomitant increase in the number of women enrolled in Non-traditional programs, i.e., there were indications that there was progress in sex equity.

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[5] This shift in New York was due almost totally to the state's use of a "Trade & Industrial Other" program classification. This is a "catch-all" classification and may be markedly affected by the programs offered in the state. In all other Non-traditional programs New York showed continued gains in women's enrollment.

It appears that the greatest increases in women's enrollment in Non-traditional programs occurred in states where a true planning process occurred, i.e., where detailed plans for the eradication of identified problems were formulated and where efforts to achieve sex equity extended beyond a mere rehashing of the verbiage of the legislation and regulations. The greatest gains were in California, and to some degree in New York, where planning systems to achieve goals and timetables were established; where monitoring systems were established; where funds were committed to establish sex equity programs; and where efforts were made to utilize the entire state staff to address sex equity issues.

Based on their state reports, major efforts clearly were mounted in Texas and Oklahoma to achieve sex equity. The former state was so far below the national average in 1972 in Non-traditional enrollments that, although marked improvements were indicated by the data, it remained below the national average in 1978. The Non-traditional enrollment of women in Oklahoma also continued to remain below the national average. Yet both Texas and Oklahoma had State Plans which were clear, practical and required assurances from their LEAs. Additionally, Texas established specific goals and timetables by occupational training area and by school level (secondary, postsecondary, and adult).

In summation, the detail provided in the State Plans regarding implementation of the sex equity provisions varied, and sometimes correlated with improved enrollment patterns. It appears that the achievement of sex equity requires not only the commitment of major funding, but also the establishment of an entire system that requires, as well as encourages, such planning activity.

III. ANALYSIS OF RESEARCH STUDIES

The Vocational Education Amendments of 1976 mandate national studies of the impact of the legislative provisions. Two which pertain to sex equity are: (1) a study to be conducted by the Commissioner of Education of the extent to which progress had been made in eliminating sex discrimination and sex stereotyping in all vocational education programs assisted under the Vocational Education Amendments of 1976; and (2) a study to be conducted by the National Institute of Education of the impact of the 1976 Amendments, which was later designed to include sex equity issues.

Three volumes of the Commissioner's study, reported as The Vocational Education Equity Study[1] prepared by American Institutes for Research (AIR), were reviewed for this study. In this section of the report, Volumes 1 and 2 are summarized. A summary of important findings from Volume 3 is in the appendices.

The National Institute of Education studies are not yet complete and data collected for the studies were unavailable for review; however, The Planning Papers for the Vocational Education Study,[2] a preliminary document from the National Institute of Education, contains a examination of four major national longitudinal surveys of American youth conducted within the past twenty years. This data sythesis is also reviewed in the following section.

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[1] American Institutes for Research, The Vocational Education Equity Study, Volume 1: The Primary Data, Laurie R. Harrison, et.al. April, 1979; Volume 2: Literature and Secondary Data Review, JoAnne Steiger, et.al. March, 1979; Volume 3: Case Studies and Promising Approaches, Jeanette D. Wheeler, et.al. Palo Alto, CA, March, 1979.

[2] The National Institute of Education, The Planning Papers for the Vocational Education Study, Publication No. 1, "Effect of Vocational Education Programs: Research Findings and Issues," John T. Grasso and John R. Shea. Washington, DC, 1979.

THE VOCATIONAL EDUCATION EQUITY STUDY, VOLUME 1, THE PRIMARY DATA

From data and information collected during the Fall of 1978, two years after the legislation but only one year after the implementing regulation was published, the study reported the following findings*:

State Level Activities

- Two-thirds of the state Directors of Vocational Education and the Sex Equity Coordinators reported that their states were implementing the following four activities:
    - Reviewing grants made by the state to ensure the needs of women are addressed;
    - Gathering, analyzing, and disseminating data on the status of men and women students and employees;
    - Systematically reviewing all vocational education programs in the state for sex equity;
    - Assisting local agencies to expand opportunities for women.
- Personnel in slightly more than a third of the states reported funding or sponsoring activities to create greater awareness of inequities and nontraditional options, or to provide special job development, placement, and follow-up services for nontraditional students.
- The activities which appeared to be receiving the least attention, and for which the greatest percentage of state Directors reported no implementation plans were:

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* Some inconsistencies on similar questions are evident among responses received from state, district and/or school level personnel; data are reported here as contained in the original study.

  - Monitoring the implementation of laws prohibiting sex discrimination in all hiring, firing, and promotion procedures at the local level;

  - Community liaison activities to improve opportunities for women;

  - Assisting employers to improve opportunities for women.

- In general, staff at the state level reported little involvement in local level staffing matters. Only one Coordinator reported that incentives were being provided to schools to acquire or promote staff in occupational areas which were not traditional for their sex.

- Of the activities specified in the legislation, Sex Equity Coordinators reported that on the average they were spending a quarter of their time creating awareness programs and activities designed to reduce inequitites. At the time of the AIR study, they felt that these were the most useful activities for achieving sex equity in their states.

District Level Activities

- Local Directors of Vocational Education and of Guidance and Counseling reported that LEAs were placing their greatest effort on monitoring laws which prohibit sex discrimination in staff hiring, firing, and promotion and on ensuring male and female representation on all Local Advisory Councils. Close to two-thirds reported that these activities were being implemented. However, these activities had not resulted in a more equitable distribution of men and women in vocational education administration positions at the LEA level. There still was a predominance of men who were local Directors of Vocational Education (90%) and local Directors of Guidance and Counseling (70%).

- Approximately two-thirds of the LEAs were reviewing funding practices to assure that guidelines regarding sex equity were carried out.

- LEAs were considerably less involved in research, evaluation, data collection, and dissemination activities than in review and monitoring activities.

The LEA Directors were asked if their agencies had conducted Title IX self-evaluations that included vocational education. Over 70% of the responding Directors indicated that they had implemented or completed reviews of all programs for sex inequities, and reviews of admission and recruitment policies and practices. Less activity had been carried out on the review of curriculum materials for sex inequities. Fifty-five percent of the responding Directors indicated implementation of curriculum reviews; however, almost 40% had initiated very little or no activity.

The Title IX reviews of vocational education programs, reported by a majority of LEAs as already implemented, had had little effect on student enrollment. Enrollment continued to reflect traditional enrollment patterns.

Personnel at postsecondary institutions (40%) were more likely than personnel at secondary schools (15%) to have undertaken activities to reduce sex inequities in staffing patterns.

In general, according to LEA Directors, school level activities were "informally implemented." Thirty-eight percent of the LEAs had implemented activities to make students aware of non-traditional options. Although 24% of the LEAs had implemented day care and 22% had implemented community liaison activities, over half had no plans to carry out these functions. The percentage of LEAs undertaking student or community-oriented activities was generally smaller than the percentage undertaking data collection, monitoring, and review activities.

Activities of Counselors and Teachers at the School Level

- Sixty-three percent of the counselors reported that programs to encourage non-traditional enrollment were being formally and informally implemented.

- Approximately 47% of the counselors reported that their LEAs were implementing programs to alert students to inequities and 39% were making special guidance services available to non-traditional students.

- Twenty-two percent of the counselors reported that their LEAs were engaged in community liaison activities. Twenty-nine percent reported they were providing day-care services.

Instructors and counselors reported efforts to encourage students to enter non-traditional programs; 27% of the instructors and 37% of the counselors reported formal implementation of this kind of activity at the school level. However, approximately 39% of instructors and 22% of counselors reported no plans for or knowledge of programs of this type. Approximately 36% (sic) of instructors and 18% of counselors reported formal preparation for special job development or placement programs, while approximately 50% of both groups reported no activity. At a maximum, a little more than a third of the schools were actively sponsoring programs for students.

Only 13% of both instructors and counselors reported that their schools were sponsoring programs for employers or community organizations to make them aware of problems of inequity; almost three-quarters reported no plans to do so. Approximately a quarter reported implementing special guidance and counseling services for non-traditional students; approximately 14% reported that day care services were being provided. Thus, little student or community-oriented activity appears to have been taking place at the school level.

Junior colleges and technical institutions appear to have been making the greatest effort to achieve sex equity, and comprehensive high schools and vocational high schools the least.

Perceptions of Sex Equity Problems and Progress

- A quarter to a third of the respondents at the state and local levels of the educational system generally agreed that rules denying admission to courses on the basis of sex, unwritten understanding that some courses were for males and others for females, and teacher reluctance to have non-traditional students in their courses had all changed for the better in the past five years. Yet, unwritten understandings and teacher reluctance to have non-traditional students in their courses were generally indicated as most in need of further change.

- Vocational educators at all levels indicated that community attitudes and values presented the major constraint to sex equity in vocational education. Constraints emanating from parental attitudes and influences were the second most commonly mentioned constraint.

- Representatives of outside organizations and agencies interviewed were critical of vocational education's efforts to address inequities. Impediments to change within vocational education were thought to be the predominance of male instructors and administrators, and stereotyped materials. In general, the representatives of outside organizations felt there must be stronger enforcement of the legislation pertaining to sex equity.

- Approximately 25% of all respondents (state and local staff plus outside respondents) felt it was justifiable to take the sex of a student into consideration when determining the type of work-study, cooperative education, or job placement that was arranged. However, few individuals at any level felt there were circumstances in which inequitable classroom assignments were justified.

It is important to note that state staff indicated higher levels of implementation of review and monitoring activities than of activities designed for students (which were felt to be most effective by the greatest number of state staff). Encouraging male and female representation on Advisory Councils was perceived by the greatest number of individuals to be least effective. There appears to have been an inconsistency between those activities which states were emphasizing and those activities which were felt to be most productive.

State Impact on School Activities

School level activities that appeared to be most closely associated with those at the state level were awareness efforts and support activities for students. Furthermore, monitoring/review/data collection which represented the bulk of state level activity generally had the highest correlation with the indicators of activity at the school level. This is significant because it represents an important linkage between state and school: i.e., the more attention the state paid to what the school was doing, the more the school tended to do.

Schools that made a concerted effort to enroll non-traditional students, to assure sex equity in student programming, and to eliminate discrimination in employment were also those in which enrollment of women in non-traditional training was highest.

In sum, those schools with higher activity indicators seemed also to have been those with higher non-traditional enrollments. There were more significant correlations with non-traditional female enrollment than with non-traditional male enrollment. However, those indicators reflecting activities aimed directly at students also correlated significantly with non-traditional male enrollment.

Conclusions of Volume 1

The two conclusions of Volume 1 most relevant to this study were:

- A concerted effort must be made to identify and disseminate exemplary programs and strategies for overcoming sex inequities in vocational education.

  At the time of the study there were few examples of successful efforts to reduce sex inequities in vocational training programs. It is of vital importance that information on successful strategies be disseminated to the widest possible vocational education audience.

- There must be considerably more emphasis at all levels on activities designed to overcome inequities, in addition to the monitoring and reviewing designed to discover such inequities.

  The need for efforts to overcome inequities is a major theme throughout the legislation. However, the primary form of activity observed consisted of reviewing and monitoring -- activities which are passive in nature. Corrective action is needed to overcome inequities discovered. States, local education agencies, and schools must be provided both with incentives to act and with examples of successful approaches. Data from this study revealed that schools which made major efforts to address inequities had a higher proportion of non-traditional students. Concerted efforts, particularly those which directly involve students, are crucial in reducing inequities.

THE VOCATIONAL EDUCATION EQUITY STUDY, VOLUME 2, LITERATURE AND SECONDARY DATA REVIEW

This volume cited studies undertaken prior to the enactment of the Vocational Education Amendments of 1976. The studies indicated that, by and large, the schools had served to reinforce the sex stereotypes of the larger society. Girls had been reinforced to develop "feminine" behavior patterns and prepare for lives as wives and mothers, not as wage earners. When girls enrolled in courses to prepare for gainful employment, they concentrated in traditionally female fields. Several studies suggested that girls got little encouragement from counselors to take non-traditional courses.

Attitudes Toward VEA '76

One relevant study cited was Dykstra (1977), which investigated the attitudes of vocational educators in Colorado toward implementation of the sex equity provisions of the 1976 Amendments, and their level of agreement with each of the requirements. Sixty-six percent of the instructors, 57% of the local Directors of Vocational Education, 38% of the teacher educators and 28% of state staff disagreed with the provision that set aside $50,000 for sex equity personnel at the state level. A majority of respondents disapproved of the provision of day care for children of students at the secondary level. They also disagreed with provisions of vocational education programs for displaced homemakers; however, 73% agreed with the required review of the distribution of grants to assure that the needs of women are addressed. In general, the state staff were more supportive than local staff of the new legislation.

Need for Research

A need for further research in the following areas was cited: (a) the course entry process; (b) training in school; (c) placement of students;

and (d) the attitudes and behaviors of administrators, teachers, counselors, and parents, as well as students.

The authors maintained that studies generalized about vocational expectations and achievements based on examinations of college graduates, although half the population does not go to college, and far more than half does not complete college. The working class woman and her relationship to the occupational world was conspicuously absent from existing research literature (Roby, 1975).

The meaning of work to working class women needs to be explored. They are presumed to have low motivation and career interest, despite the fact that from an early age most expect to work a good part of their lives.

PAPER ON EFFECTS OF VOCATIONAL EDUCATION PROGRAMS: RESEARCH FINGINGS AND ISSUES

This paper, contained in The Planning Papers for the Vocational Education Study, issued by the National Institute of Education, reviewed and synthesized data compiled through major national logitudinal surveys as follows: Project Talent, (1960); Youth in Transition, (1968); the National Longitudinal Surveys (of Labor Market Experience), (1968); the Longitudinal Study of Educational Effects (also known as the National Longitudinal Study of the High School Class of 1972).

The methodological shortcomings and dates of these studies affected their findings. The number of women graduates from occupational curricula other than business and clerical was too small to permit conclusions regarding the effect of their high school programs on later employment.

Jobs Sought

The studies reiterated women's segregation in occupationally stereotyped courses within all three curricula: college preparatory, general, and vocational education.

According to Grasso and Shea, these 1968 National Longitudinal Survey data are not out of date. A 1976 Gallup Youth Survey found that women retained occupational goals similar to those held by students in the 1960s. For example, the top career preferences of teenage girls still included: secretary, teacher, nurse, social worker, and hairdresser, among others. The only difference reported (Prediger, et.al., 1974) is that the proportion of high school girls who expect to work outside the home had risen over the decade.*

Wages

The authors found that in contrast to the results for men, the evidence indicated that vocational education for girls in high school strongly benefited them later in the labor market. However, unexpectedly, it was found that the wage and earnings statistics demonstrated that the benefit in wages was in sex-typed occupations. This may have resulted because only the business and clerical course had enough women students for separate analysis.

Conclusions of the Paper

- Grasso and Shea suggested that those who criticize vocational programs on the basis of occupational sex-segregation should carefully reconsider the alternative occupations available to the average young woman.

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* Subsequent studies have noted that massive changes occurred in the attitudes and aspirations of young females relative to work, education, and childbearing. For example, only 25% of females surveyed in the 1979 NLS reported that they wanted to be exclusively homemakers at the age of 35. This is a decrease of 35% since the 1968 NLS. (Borus, et.al., 1979.)

- The results suggested that women working in non-sex-typed jobs were not necessarily better off than other young women. The effects of holding a traditional job varied by level of schooling and by race, but apparently those with less than a baccalaureate degree had a financial advantage working in a sex-typed job.

Commentary

The Primary Data, Volume 1, The Vocational Education Equity Study by AIR and Section II, Analysis of State Reports and National and State Enrollment Data, of this current study for the two Councils reflect similar findings regarding conditions in the state and local education agencies and provide some insights which may be useful in considering where the vocational education legislation may be strengthened for improved implementation.

On the other hand, the Literature and Secondary Data Review, Volume 2 of the AIR study, because of the dates of studies reviewed, merely redefined the conditions that the sex equity provisions of the legislation were designed to correct. Therefore, Volume 2 provides only limited insights regarding the impact of the new mandates and provisions.

It should also be noted that the research by AIR was conducted only one year after Federal regulations for implementing VEA '76 were issued -- regulations were published in October 1977; and the data and information collection are from the spring of 1978. Caution is warranted since the changes reflected in the field at that time more likely resulted from the implementation of Title IX legislation than from the sex equity provisions of the Education Amendments of 1976. Likewise, more recent changes as a result of VEA '76 are not reflected in these early data.

The paper on "Effects of Vocational Education Programs: Research Findings and Issues" attempted to examine national longitudinal studies for their relevance to vocational education, even though none reviewed was originally designed to analyze vocational education. Consequently, the studies' employment-related data are inadequate for drawing precise conclusions on vocational education. Additionally, the samples contained in the studies are outdated -- the oldest of the studies, Project Talent, collected data in 1960. In the interim there has been a "subtle revolution" in the work patterns of women, markedly affecting their training for work as well. The Grasso and Shea contention that conditions had not changed for women since the 1960s cannot be validated until further research has been undertaken. The conclusions drawn in their study, however, may be relevant to the consideration of the need for changes in vocational education legislation.

IV. HEARINGS

Approximately 80 persons from 21 states participated in the Councils' two public hearings on sex equity in vocational education held in May, 1980. The hearings, designed to gain the perspective of individuals and groups affected by the sex equity provisions and those responsible for implementing or monitoring the legislation, were held in New York City (May 8-9) and Denver, Colorado (May 15-16). Witnesses were invited to present testimony before members of the two Councils, and at least one member of a State Advisory Council on Vocational Education.

ORGANIZATION AND CONDUCT OF THE HEARINGS

The regional design of the hearings -- one in the East and one in the West -- was based upon prior studies which found that the participation of women in non-traditional education varies by the region of the country, size of metropolitan/rural location, by age and by racial/ ethnic group.[1] The assumption was that, although the broad legislative issues raised in the two locations would be similar, the variables affecting service needs of women and the administrative tasks of service delivery would be different.

The two hearings were publicized through public notices, media and letters to a wide range of organizations and associations concerned with sex equity issues, encouraging them to attend the hearings and participate in the discussions and/or submit written testimony. A wide variety of knowledgeable individuals were invited to address key issues of concern to the Councils; additionally, evening sessions provided opportunity for the Councils to hear from other persons who wished to present testimony.

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[1] A Study of the Factors Influencing the Participation of Women in Non-traditional Occupations in Postsecondary Area Vocational Training Schools, Rj Associates. Arlington, VA, 1977.

Rural Women in Postsecondary Vocational Education, Rj Associates. Arlington, VA, 1978.

Women in Non-traditional Vocational Education in Secondary Schools, Rj Associates. Arlington, VA, 1978.

A panel format for the hearings enabled the Councils to receive testimony focusing upon issue areas; witnesses presented testimony individually followed by group discussion and interaction with the Council members. Each hearing began with a panel presentation of "State Profile" -- an overview of the progress of one state in detail (in the East) or several states (in the West) in implementing the sex equity provisions of the Federal legislation. The second panel at each hearing focused on the "Perspective from Persons Outside the Vocational Education System" with an emphasis on testimony from organizations concerned with sex equity issues. The third panel in the East concentrated on the "Special Needs of Minority Women;" in the West the third panel directed its attention to the role and functions of the Sex Equity Coordinators. The fourth and final Eastern panel examined "Supportive Services/Innovative Programs;" the Western, "Postsecondary Vocational Education and Displaced Homemaker Programs." An evening panel in the West also addressed the "Special Needs of Minority Women."

A "Roundtable Discussion" on the implications of the testimony for legislation closed each hearing. This session enabled Council members to discuss with the witnesses the issues raised during the hearings and related concerns. It also provided an opportunity for others present to question witnesses and Council members and to discuss the issues.

SUMMARY OF TESTIMONY

Witnesses addressed the full range of issues of interest to the Councils: funding, the focus on sex equity, special needs of women, postsecondary education, the role of Sex Equity Coordinators, the utility of public hearings on State Plans, attitudes and training of vocational education personnel, and the impact of related legislation; additionally, they raised several other areas of concern: services and programs for displaced homemakers, the needs of minority and adult women, attitudes of parents and peers, concerns that sex equity include accessibility for both sexes. The role of Federal legislation and government in vocational education, curriculum, and texts, and the problems associated with changing attitudes were covered. There was discussion of programs, successful efforts, and barriers to the progress of sex equity.

This summary synthesizes the comments, information, and detailed statements of witnesses on issues. It is not intended to be an exhaustive review or replication of testimony, but rather a focus on the substantive points of testimony and written statements received.

Federal Role

> "The Vocational Education Amendments of 1976 not only outlawed discrimination in vocational programs, but also mandated active efforts to reduce sex bias and stereotyping. It is this area of affirmative action that the new Federal vocational education amendments need to address once again with renewed strength and commitment. The new OCR Guidelines for Vocational Education are an encouraging sign that equity in voc-ed is a national priority. Adequate staffing and accountability procedures at state, local, and Federal levels, however, must be provided to ensure that these new guidelines do indeed support the full implementation of the 'spirit' as well as the 'letter' of the law."
>
> Sex Equity Coordinator

Many witnesses expressed concern that the law is too vaguely written. In some cases, the "letter of the law" or the minimum requirements are being met without any significant progress toward equity. The problem is twofold: (1) the legislation is not flexible enough to allow the various administrative and service functions within the vocational education delivery system to operate according to the different structures of the states and localities; and, (2) the leniency of "may" versus "shall" language leaves little opportunity for accountability and enforcement of the sex equity provisions.

Serious concerns were raised, especially at the New York hearing, regarding whether the current vocational education system was precluding the equity and upgrading needed by women and whether fundamental changes would be required in order to assure equal access. While most of the witnesses stated that their respective states met the minimum requirements for sex equity, few cited examples of state initiative to assure that the intent as well as the letter of the law was enforced. For example, through the hearings only two states (New York and California) were identified which had required LEAs to meet specific sex equity requirements as a condition of funding.

Witnesses suggested that, as a minimum, mandatory language be included in the reauthorization to require: sex equity in vocational guidance and counseling; services for displaced homemakers; curriculum revision to eliminate sex bias and sex stereotyping; sex equity training and personnel development for administrators, teachers, and counselors; day care programs; and assistance to women in preparing for and obtaining non-traditional employment.

Concern regarding the Federal role extended beyond the reauthorization of vocational education as a single piece of legislation and suggested the need for broad legislative coordination to achieve sex equity:

> "There have been many important efforts to provide for improved coordination at the Federal level in the area of education/ work. Interagency coordination is taking place . . . Two major national advisory councils have joined forces to hold these hearings . . . Next year will provide an extraordinary opportunity for furthering a coordinated approach if, as may be the case, vocational education legislation is reauthorized along with the youth programs of CETA (the Youth Employment and Demonstration Projects Act, or YEDPA), and in conjunction with the new Administration proposal. As the

> broad issues of education/work are addressed, specific approaches should be identified for meeting the needs of special populations in a comprehensive and coordinated way at the Federal level."
>
> Legislative Analyst for a National
> Organization of States

Witnesses generally agreed on the need for linkages between vocational education and other work/education agencies. The Comprehensive Employment and Training Administration (CETA) and the Office for Civil Rights (OCR) were mentioned repeatedly as agencies which should have a close working relationship with vocational education.

One witness suggested that a mandatory sex equity component should be built into all Federal legislation. It was also suggested that the Vocational Education Amendments could require that teams of equal education opportunity compliance officers and technical assistance specialists be formed in every state agency and available in adequate numbers and levels of positions to have the clout to enforce the OCR guidelines at the state and local levels.

Special Needs of Women

Supportive services is one of the options the legislation leaves to state discretion -- such services might include child care, transportation, and attention to the needs of displaced homemakers, minority women and adult women.

Child Care

The crucial need for adequate, affordable child care services was addressed by a number of witnesses, as was the need for legislators to recognize that child care is essential and clearly related to employment. Witnesses stressed that in order for vocational education to reach women efforts must be made to ensure that they

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remain in school. One witness pointed out that the dropout rate for students entering the ninth grade in the New York City public schools is 45%, that pregnancy is the major reason for dropping out, and that about 80% of pregnant teenage dropouts never return to school. Nor is the problem confined to urban areas; Maine has the highest teenage pregnancy rate in the nation.

There is an extreme shortage of day care for children under three years old. New York City was cited as an example; there are only eight centers for infants in the city, five in Brooklyn where they are inaccessible to much of the population. Inability to find affordable infant care is a problem especially for teenage parents.

> "In a kind of oversimplified way and as absurd as it may sound, I would say that the special needs of minority women as they pertain to vocational education are, first and foremost, birth control and adequate childcare."
>
> Dean of Continuing and Adult Education and
> Chair of a Commission on the Status of Women

Despite the great need for child care services, only one state represented (New Mexico) indicated that day care services were provided through vocational education funds and this through a joint training and service project. In Oregon, the LEA decides whether to fund day care.

Although witnesses stated the need for Federal attention to day care, they cautioned that the approach to child care must be flexibile. Regulations of CETA and of many state departments of public welfare require that children be placed in a licensed day care center. Unfortunately, these centers are "day" care programs and are not available for evening adult education students. Provisions allowing women to pay their relatives and neighbors for child care were suggested as a means of dealing with the time problem as well as the shortage of available centers.

Transportation

Accessibility to vocational education is often impeded by transportation problems, a particular difficulty for low-income women. A Denver hearing witness, whose program includes job placement as well as vocational education, noted that the costs of either owning an automobile (payments, repairs, gasoline) or using public transportation (not always available) to reach school or work have affected the program's ability to serve women. Often the problem is compounded when children must be transported to day care centers as well. Rural women, as well as men, often have no access to public transportation and a witness from Colorado noted that only one city in that state has even limited public transportation.

Displaced Homemakers

> "Most displaced homemakers need vocational services. Most are unprepared to enter the occupations in which there is a real demand today. Vocational education funds coordinated with state and CETA funds could address these needs beautifully. A small beginning has been made. But there is a great deal yet to do."
>
> Director of a Displaced Homemaker
> Program

Currently, only two legislative acts include displaced homemakers among those eligible for funding in employment and training programs: the Educational Amendments of 1976 (vocational education programs for displaced homemakers and other special groups) and the Comprehensive Employment and Training Act Amendments of 1978. Some states have passed legislation to assist displaced homemakers while other states have provided little or no money for assistance. Witnesses stressed that until very recently, the plight of the displaced homemaker had not come to the public's attention and only in the past few years have legislators become concerned about providing services to these women.

The displaced homemaker programs represented at the hearing presented program designs that varied in services provided and funds available. Most witnesses agreed that more support was needed from the community and the legislature. One witness expressed concern that vocational education money earmarked for special groups had not been used because no requests for proposals had been written at the state level.

The testimony contained many strategies for program improvement, expansion and development. Some of these have already been incorporated into the programs and some were "think pieces;" they include the following:

- The term "displaced homemaker" is for some unfamiliar and/or has negative connotations for employees and students. One witness suggested that "career changers" might be a better description.
- More data are required to substantiate the existence and needs of displaced homemakers.
- Advisory committees should be established to monitor expenditures of vocational education funds to insure their appropriation to displaced homemaker programs.
- Program personnel should develop working relationships with vocational education staff at the administrative level to coordinate efforts, provide support, and conduct joint planning sessions.
- Off-campus displaced homemaker centers (as opposed to centers at educational institutions) may provide a better environment for women returing to school or work.
- Non-traditional training should be made available through displaced homemaker programs. A hands-on curriculum could be used to introduce such training.

- Special staff could be funded in college job placement offices to provide job referral and placement.

- One witness felt the greatest need is for synergism among the programs, the development of a collective identity:

> "...there is an enormous need for collaboration and cooperation between all displaced homemaker centers. The centers which are community based organizations and those that are housed in educational institutions exist for the same purpose - to help the displaced homemaker make the transition from being traumatized to being made self-sufficient, as effortlessly as possible."
>
> Program Associate for a Displaced
> Homemaker Program

Minority Women

Many of the issues expressed as being of particular concern to minority women (e.g. day care, transportation, counseling) are issues affecting all women, and minority men as well. Hispanic witnesses discussed the need for outreach to minority peoples through community based organizations; Black, Hispanic and Indian witnesses cited the negative image of occupational education programs in minority communities. These negative attitudes toward vocational education are prevalent in the minority communities whose students have often been stereotyped as scholastically unable to compete in academic studies. This is particularly true in the Black community. As a result, many minority youth are encouraged by their parents to shy away from "shop" courses and to get an academic education which will prepare them for a white collar job.

> "Specifically, there is a need to disseminate to the Black Community the image of vocational education that elevates and places emphasis on the advantages afforded one who receives both a sound academic education plus vocational skill training."
>
> Career Development Specialist for a
> Local Education Agency

There was concern that vocational education work to eliminate attitudes which cause Indians to be placed in courses based on the assumption that they are "good with their hands" as a result of beading and making baskets.

Difficulties facing Hispanic minority women were identified. Witnesses at the New York hearing emphasized the need for programs designed to address unique cultural differences as a means of encouraging the participation of minority women in vocational education. In the West, again the hearing panel was told that because of cultural differences many Mexican-American women were reluctant to participate in non-traditional training. For non-English or limited English speaking students who are preparing to enter the work force there is a need to prepare teachers and counselors better, and to modify curriculum. Cultural variations were expressed:

> "Indian women face a great deal of societal pressure to marry and bear children at an early age. And the Indian mother has always been viewed as the one most responsible for caring for and raising the children. Her family and peers tend to value her skills in homemaking and child rearing more than for any ambitions and abilities she may have."
>
> Special Projects Coordinator of an
> Indian Education Program

> "National programs and Federal legislation have had an impact upon the status of black women; however, it has not been significant. Black and Spanish speaking women are still at the bottom of the ladder in every instance except unemployment. According to 1978 Bureau of Labor Statistics Report, minority teenage girls accounted for 34.5% of the unemployment population, surpassing even black teenage boys."
>
> Career Development Specialist for a
> Local Education Agency

In addition to the perceptions and values affecting minority interest in vocational education, there was concern for more minority involvment in program planning and monitoring. Advisory Councils drew attention -- one witness expressed concern that one Black woman on an Advisory Council does not mean there is adequate minority representation, that the needs of Hispanic and Indian women are very different. A possible improvement might be requiring proportional representation of the state's minority population.

Adult Women

Again, for adult women, the issues of child care, counseling, and transportation were raised in regard to the postsecondary vocational education delivery system. Witnesses stated that women tend to make career decisions later in life than men and suggested that there be more emphasis on enrollment equity and program development in postsecondary vocational education.

During the Eastern hearing there was considerable discussion of the barriers for women seeking to enter apprenticeship programs and non-traditional employment. Witnesses at the Western hearing also cited a lack of action on, or even recognition of, the problems of age discrimination as well as sex bias. They suggested the need for changes within the delivery system itself, as well as the need to prepare potential workers to be employed in occupations predominated by the opposite sex.

Sexual harassment and abuse were cited as critical problems for non-traditional employment and occupational preparation and, although no suggestions for resolving or dealing with these issues were offered by witnesses, many questions were raised. If the vocational education system trains women for non-traditional jobs, will industry employ them? Can vocational educators influence recalcitrant unions and contractors? Is there any way for vocational educators to address the sex discrimination and age discrimination (many trades continue to have upper age limits for apprenticeships despite 1978 Department of Labor affirmative action guidelines which permit their waiver) that women in adult education programs will later encounter?

Curricula and Texts

> "Textbooks continue to reflect stereotyped views of men and women, especially in the vocational areas where women are virtually nonexistent."
>
> Sex Equity Coordinator

> "One woman role model can do more to effect change than 100 planned activities. One woman to demonstrate the absurd nature of the present inequities. One woman to teach, to demonstrate, to lead."
>
> Administrator of a State Regional
> Education Agency

The need to introduce students to a range of career possibilities through infusing sex-fair materials into the curriculum was expressed by many witnesses. It was generally agreed that the curriculum should include techniques that serve to expand students' views of their potential career options and expose them to women and men in non-traditional jobs.

Witnesses suggested exploratory programs at the junior high school level as a means to help students make better decisions in high school. Additionaly, it was suggested that coordination between vocational education and career education programs may be a means to ensure that non-sexist career materials are infused into the curriculum at the elementary school level.

Counselors and Instructors

> "Sex stereotyping is still a problem in most school systems. Studies show that both male and female counselors respond more favorably to female students who select traditional career interests. . . Very few women are local vocational administrators or instructors in the nontraditional programs, hence few role models for girls to see."
>
> Sex Equity Coordinator

Witnesses at both hearings agreed that more focus on pre-service and in-service sex equity training for the instructors and counselors is needed because they affect the students' career and training choices. Programs that help educators to examine their personal views and attitudes regarding vocational training and non-traditional work opportunities for women are also needed. Witnesses suggested that attendance of counselors and teachers at workshops or seminars on sex bias should be made mandatory.

One witness pointed out that even though funds are available to acquaint guidance counselors with changing work patterns and sex equity requirements, there is little change because the funds are not used. Many counseling departments do not give high priority to sex equity issues; therefore, girls are not fully informed of their career options and, in many instances, are steered away from traditional male courses such as math and science. Without a background in math or science, girls are unable to meet requirements for entry to a majority of non-traditional training programs.

Vocational education funds are also available for in-service training for vocational education teachers and other staff members to overcome sex bias and stereotyping. However, the experience of many of the witnesses was that instructors are resistant to most programs and activities that deal with changing their attitudes. Another factor which deters instructors from taking additional training is that in some states certified vocational instructors are not required to take additional course work or training in order to continue teaching. One example is New York State where 70% of all vocational teachers are permanently certified, 100% of all home economics teachers are female, and 98% of the industrial arts teachers are male.

Other witness suggestions included:

- Vocational aptitude tests should be examined for inherent sexism.
- Principals, school board administrators, and certification committees should require in-service and pre-service sex equity training for instructors and counselors.
- More bias-free guidance materials should be developed.
- Women instructors should be recruited and trained to teach non-traditional courses.
- Counselors should develop support systems for girls in non-traditional courses. Often girls participating in these courses are subjected to sexual harassment.

Public Hearings

The Federal legislation mandates public hearings as part of the development of each State Plan for vocational education. Although this mandate was not designed solely to achieve sex equity, it does theoretically present the opportunity for the special needs of women previously noted in this section, as well as other sex equity issues, to be heard. The potential is for individuals and groups to state their concerns about existing and planned vocational education programs, and to have an impact on the State Plan before the state receives Federal funds.

Several of the individuals and organization representatives outside of the vocational education system testified on the public hearing process. Their attempts to monitor and review State Plans and their testimony at the mandated public hearings had shown a mixed effect on the State Plan. One witness' experience was positive:

> "It is my conclusion from our experience that recommendations will be implemented only through the commitment of the top administration. At the same time, the top administration will not be able to commit itself to implementing recommendations which are never made. Because the recommendations and report of the (State) Commission for Women were available at the time that he took office, (Deputy Secretary of Education) was able to move rapidly to implement policies reflecting our concerns."
>
> Chair of a State Commission for Women

Other witnesses stated that their comments and recommendations at public hearings had had only limited effect; many felt their testimony had no impact or only very minor impact on implementation of the sex equity provisions. Another questioned the whole process:

> "Vocational education should be initiating and doing, not responding."
>
> Director of a State Commission for Women

Witnesses cited the following problems with the public hearing process:

- insufficient time to review State Plans (some Sex Equity Coordinators also expressed this concern);
- women's groups and others who may be interested in sex equity issues are not aware of the public hearing process;
- groups that have testified repeatedly without seeing positive results may not feel it is an effective use of their time;

- citizens often find the language of the hearing materials confusing. One witness stated:

> "It is difficult to understand the system, and I think they like it that way."
>
> Director of a Commission on the Status of Women

Sex Equity Coordinators

One of the major new provisions contained in the Education Amendments of 1976 was the requirement that each state employ full-time personnel to assure implementation of sex equity. Funded for a minimum of $50,000, this Sex Equity Coordinator has ten specifically mandated functions. The legislation allows considerable flexibility, however, regarding the position of the Coordinator within the organization and how the functions are accomplished. One Sex Equity Coordinator's statement exemplified the view of many:

> "I can assure you that Sex Equity Coordinators are working hard to achieve sex equity in education. We feel strongly that every student should have the opportunity to learn concrete skills which will ultimately lead to gainful employment. Vocational education plays an important part training students to enter the world of work. As the nature of our society becomes that much more complex, the preparation of all students for survival in that society becomes even more vital."
>
> Sex Equity Coordinator

The role of the Sex Equity Coordinator was viewed by witnesses as an essential factor in achieving equity and in eliminating sex bias. The need for expanded support of this position was generally expressed.

Although there was general agreement regarding the necessity for such a position, the specific responsibilities and functions raised considerable discussion among witnesses. The following capsules highlight the issues raised:

- The ten mandated functions of the Sex Equity Coordinator require an enormous amount of work with very little money and, in some cases, no staff beyond the Coordinator. The Coordinators need technical assistance and training to enable them to perform their responsibilities. These services should come from the Federal level.

- Although the ten mandated functions are time consuming given current staff and funding, they should be retained; all of the functions are necessary. It was recommended that accountability for sex equity be built into the jobs of other state officials so that equity becomes a responsibility which reaches beyond the Coordinator. Witnesses suggested that some of the duties of the Coordinator be infused into the jobs of the local administrators, state Directors of Planning and others in the system.

- The across-the-board funding level of $50,000 for sex equity personnel is not appropriate in every state. The current allocation system does not take into account the major differences in the states (area, population, number of LEAs, etc.). Fifty thousand dollars is not enough money in most states for sex equity programming and many coordinators have been unable to secure additional funds. The legislation says that states "may also use part of the grant to support additional full time personnel." However, in many states the Sex Equity Coordinator has only a secretary; in some states, not even that.

- It was suggested that persons responsible for presenting formal testimony and recommendations to Congress for reauthorization should "pick the brains" of the coordinators. Their experiences have been invaluable and many have concrete suggestions that should be included in any statement on legislative policy.

- Coordinators should develop a stronger working relationship with CETA. They should be required to sit on State Employment and Training Planning Councils and work closely with Private Industry Councils, local CETA Advisory Councils, and other community groups.
- Some witnesses wanted the Sex Equity Coordinator to monitor vocational education from a position outside of the department of education. Others thought that an inside position held most potential for effecting change. Although most Coordinators are located within the state vocational education unit, one felt her placement in another part of the state department gave her more access to resources.
- Another area which generated differing opinions was the appropriateness and effectiveness for the Coordinator of having compliance responsibility. Some witnesses wanted the position coordinated with Office for Civil Rights enforcement functions. Others felt that the Coordinator should be responsible only for technical assistance. They maintained that either: 1) carrying out the "police" function detracts from the support and trust required to bring about change; or 2) when compliance and assistance are too closely linked, the legal clout of the former tends to overshadow the latter. There was little testimony to indicate whether the Sex Equity Coordinators had established a working relationship with the state Title IX Coordinators to combine mutual interests and similar reponsibilities.
- Witnesses generally agreed that if the Coordinator is located within the vocational unit, the position should be as close administratively to the state Director of Vocational Education

as possible. The position of the Sex Equity Coordinator in the state hierarchies varies considerably. In some states, the Coordinator is on the same level as the assistant commissioner and is consulted regarding all programmatic decisions; in other states the Coordinator is nearly powerless, having virtually no contact with program staff, no control over sex equity funds, and seeing the State Plan only at the time a signature is required. Witnesses agreed that in order for the functions of the Coordinator to be implemented, the commitment of the state Director of Vocational Education is essential. However, one witness strongly recommended that the:

> ". . .Sex Equity Coordinator or person charged with elimination of sex bias be employed outside of the vocational education system to encourage independent monitoring and evaluation. Minnesota's Council on the Economic Status of Women has a $50,000 grant to do this and in Pennsylvania the Sex Equity Coordinator is in the Department of Education, not the vocational education department. Individuals located within vocational education are subject to intimidation, compromise, and vested job interest."
>
> Director of a Commission on the
> Status of Women

Other Major Considerations

Two additional considerations were suggested by witnesses to the Councils: (1) that the Councils recognize sex equity as an issue affecting men as well as women; and, (2) that there be recognition of the difficulties involved with changing attitudes.

Sex Equity as an Issue that Affects Men as Well as Women

> "The issue of sex equity is not just for women, it is a human issue. Within the area of vocational

> education sex bias and sex stereotyping limit occupational choices made by both sexes. . . It is significant to emphasize that males are half the problem... if we are to make significant social change, more emphasis must be placed upon increasing the awareness of males."
>
> Professor of Industrial Arts

Witnesses agreed that strategies and programs should be developed that are designed specifically to broaden students' views about occupational options and that the focus should apply to men and women equally.

Witnesses urged that Federal funds should not be available for home economics or industrial arts programs which are designed exclusively for boys or girls. Co-ed industrial arts and home economics at the junior high school level were commended as an excellent means to allow boys and girls to work together on activities traditionally reserved for just one sex.

Attitudes

> "The law can mandate things, but it cannot mandate commitment to change. Attitudes of people can only be modified through intensive, meaningful, and consistent training... Programs must be developed which are geared to the adult population who come into contact with our students. Local schools must be directed to starting working with parents, students, and the community in a planned, results-oriented manner. This (sex equity) is a societal problem and cannot be dealt with in isolation."
>
> Director of a State Regional Education Agency

This statement was reflected in the testimony of many witnesses participating in the hearing. Repeatedly witnesses expressed concern over widespread negative attitudes toward the selection by women of non-traditional training and employment. These attitudes are prevalent in persons of all ages and races. Students, parents, teachers and employers often reflect the current societal pressures to conform to traditional roles. Students who do select non-traditional vocational education courses are frequently subject to harassment by their peers of both sexes, their parents, community leaders, and, in some instances, teachers. Without modification of negative attitudes and without creation of a positive awareness in the community, there is little chance of achieving sex equity in vocational education.

A survey conducted in a Massachusetts community by OPTION (Opening People to Opportunities Now) in June 1979 was designed to investigate attitudes of junior high school students, their parents, and teachers toward male/female roles in society, both at work and at home. The results of the survey presented below summarize respondents' attitudes as traditional or non-traditional:

Attitudes	Students		Parents		Teachers	
	M	F	M	F	M	F
Traditional	88%	57%	79%	69%	45%	30%
Non-traditional	12%	43%	21%	31%	55%	70%

The interesting implications of these data were discussed:

> "Notice that the majority of both students and their parents were traditional in their thinking despite the fact that their teachers, especially their female teachers, were generally non-traditional in their attitudes. It seems to me that adult attitudes have to change if equity is to become a reality in the forseeable future, since parental pressure on children to remain in the traditional career and life patterns is evident."
>
> Sex Equity Coordinator

In addition to the problems associated with non-traditional course selection, there is the problem of the broad stigma attached to the field of vocational education. One witness felt that negative attitudes about vocational training were the result of parents being embarrassed because their children were not in traditional academic programs. Many parents believe that occupational training means their children are not "good enough" to complete an academic study program and go on to college. To these parents, vocational education prevents their children from achieving the "American Dream": higher education, upward mobility, and a professional job.

In order to achieve equity successfully, strategies must be developed that address attitudes and work positively to induce change. Witnesses suggested the following programs/methods for changing these negative attitudes:

- Women who are successful in non-traditional jobs should be asked to speak to school and community groups. They could act as role models to encourage employers to hire women with non-traditional training.
- Materials should be developed for dissemination to students and counselors regarding options in vocational education courses.
- Monies should be spent on providing training for vocational education instructors and counselors.
- Materials should be disseminated to promote a positive image of vocational education by emphasizing the advantages of a sound academic education accompanied by vocational skill training. Community leaders should be made aware of the importance of expanding career options.
- Workshops and training sessions should be provided for parents, educators, and community and religious leaders who could then run similar workshops in the community.

- Schools should arrange career days to enable students and parents to explore non-traditional programs, and talk to couselors, employers, and persons working in non-traditional fields.

- Public service announcements for radio and television should be designed and produced. This approach would expose a broad range of people to positive statements about vocational education and non-traditional training, while requiring only a small expenditure of funds.

Commentary

The Councils' hearings resulted in the identification of controversies on these and related issues; they pointed to the success of the legislation in some states and in some areas, to shortcomings in others. Within each of these five issue areas, there are numerous points for discussion and deliberation. This commentary is provided to focus such dialogue:

- Federal Role -- the extent to which vocational education legislation should be prescriptive for the state and local delivery system. Will flexible or mandatory language best accomplish the intent for sex equity? Should the legislation provide for mandated linkages with related legislation to strengthen efforts to elminate sex discrimination, sex stereotyping and sex bias?

- Special Needs of Women -- the extent to which vocational education funding should be authorized and/or appropriated for child care, transportation, displaced homemaker services, programs and services specifically for minority women and adult women. Should appropriations be designated to meet the identified needs specifically of women? Should additional incentives and means of addressing these needs be explored for possible inclusion in the Federal legislation?

- Curricula and Texts/Counselors and Instructors -- the extent to which Federal legislation should/can ensure improvements in staffing and materials which affect attitudes and accessibility. Should/can Federal legislation affect these parts of the vocational education delivery system, or are there other strategies that need to be employed?

- Public Hearings -- the extent to which the process has been effective in assisting sex equity efforts. Is the current legislation sufficient to assure that public input and comment is being effectively received and addressed? Should the provisions be strengthened, modified, or deleted?

- Sex Equity Coordinators -- the extent to which the mandated functions are realistic and being implemented. What are the most effective options for administrative placement of the Sex Equity Coordinator within the states' delivery systems, for the scope of the functions and their relationship to similar functions of other legislation, and for the level of funding?

V. APPENDICES

The appendices contain the following information:

A. Lists of vocational education programs designated as Non-Traditional, Mixed, and Traditional for women in 1972. These designations were retained as a base for the analysis of enrollments in 1976 and 1978.

B. A table of the U.S. percent enrollment of women in Non-traditional, Mixed, and Traditional categories by occupational training area and year.

C. A table of the number and change in number of total, men, and women students enrolled in gainful vocational education 1972-78, for each state studied and the U.S..

D. Analyses of reports and enrollment data from the fifteen states studied, organized in the following manner for each state:

- A summary of the analyses of the state reports and enrollment data.
- An analysis of the state reports, including:
  - Specific recommendations or findings on sex equity from the State Advisory Council on Vocational Education (SACVE), the public hearing on the State Plan, the Bureau of Occupational and Adult Education (BOAE)[1] staff report on the State Plan, the BOAE

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[1] Data were collected prior to the establishment of the Department of Education and its Office of Vocational and Adult Education.

Management Evaluation Review for Compliance and Quality (MERC/Q) report (where one was performed), and the state's response(s) to the above (when the state responded).

- Unique components of the State Plan that were of particular interest and/or could not be conveyed by items in the Matrix. (See E. below.)

- A short description of all sex equity programs that were detailed in the 1980 State Plan and/or the 1978 Accountability Report.

- Fiscal year 1978 budget data for sex equity activities, including purpose of funding, funds allocated, and funds expended, from the Accountability Report. There were discrepancies in many state Reports, but the allocations and expenditures were reported from the best data available. These should be checked at the state level. Many states had an unexpended balance in their Reports, but no evidence in their Plans of the inclusion of carry-over funds from the previous year.

- A table of the percent enrollment of women in Non-traditional, Mixed, and Traditional categories by occupational training area and year.[2]

- An analysis of detailed enrollment data for 1972, 1976 and 1978. Unless otherwise specified, discussion of enrollment changes refers to changes in enrollment of women.

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[2] Data were obtained from BOAE. California enrollment data were supplied by the California State Office of Vocational Education.

E. A matrix displaying the basic substance of sex equity activities addressed in each of the fifteen State Plans.

F. A short description of the common elements of successful sex equity programs featured in the Vocational Education Equity Study, Volume 3: Case Studies and Promising Approaches.

G. Lists of witnesses at the public hearings on sex equity in vocational education sponsored by NACVE and NACWEP in New York City and Denver, Colorado, May 1980.

Appendix A

Vocational Programs Designated as Non-traditional for Women*

Agricultural

- Agricultural Supplies/Services
- Agricultural Mechanics
- Agricultural Products
- Agricultural Production
- Agricultural Resources
- Forestry
- Agriculture, Other

Distributive

- Automotive Sales
- Building, Hardware
- Petroleum

Health

None

Home Economics, Gainful & Non-Gainful

None

Business and Office

None

Technical

- Chemical Technology
- Aeronautical Technology
- Architectural Technology
- Automotive Technology
- Civil Technology
- Electrical Technology
- Electronic Technology
- Electromechanical Technology
- Environmental Control
- Industrial Technology
- Instrumentation Technology
- Mechanical Technology
- Metallurgical Technology
- Commercial Pilot Training
- Fire and Fire Safety Technology
- Forestry Technology
- Oceanographic Technology
- Air Polution
- Miscellaneous Technology, Other

Technical (continued)

- Police Science
- Water and Waste Water Technology

Trade and Industrial (T&I)

- Plastics Occupations
- Air Conditioning
- Aviation
- Appliance Repair
- Body and Fender Repair
- Auto Mechanics & Other Auto Trng.
- Blueprint Reading
- Business Machine Maintenance
- Commercial Fishery Occupations
- Carpentry
- Custodial Services
- Diesel Mechanics
- Drafting Occupations
- Electronic Occupations
- Graphic Arts Occupations
- Law Enforcement Training
- Metalworking Occupations
- Machine Shop
- Machine Tool Operations
- Welding and Cutting
- Tool and Die Making
- Metallurgy Occupations
- Small Engine Repair
- Woodworking Occupations
- Masonry
- Plumbing and Pipefitting
- Leather Working
- Firefighter Training
- Instrument Maintenance Repair
- Maritime Occupations
- Refrigeration
- Management Development
- Sheet Metal
- Other Metalworking
- Barbering
- Stationary Energy
- Atomic Energy
- Electricity
- Other Construction
- Electrical Occupations
- Trade and Industrial Occupations, Other

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* Non-traditional (NT) program = program in which women students enrolled nationally in 1972 comprised 0.0 to 25.0% of all enrolled students. Because of enrollment shifts, several programs would have moved from Non-traditional to Mixed, or from Traditional to Mixed since 1972. The categories have been kept constant, however, so that such changes are not obscured.

Vocational Programs Designated as Mixed *

Agricultural

Ornamental Horticulture

Distributive

Industrial Marketing
Transportation
International Trade
Advertising Services
Finance and Credit
Food Services
General Merchandise Sales
Real Estate Sales
Recreation and Tourism
Wholesale Trade, Other
Retail Trade, Other
Food Distribution
Hotel and Lodging
Insurance
Personal Services
Distributive Education, Other
Apparel and Accessories
Home Furnishings
Floristry

Health

Physical Therapy
Radiologic Technology
Mental Health Technology
Inhalation Therapy Technology
Dental Laboratory Technology
Opthalmic
Environmental Health
Nuclear Medical Technology
Dental, Other
Miscellaneous Health Occupations, Other

Health (continued)

Mortuary Science
Medical Emergency Technician

Home Economics, Non-Gainful

Family Relations

Home Economics, Gainful

None

Business and Office

Accounting and Computing Occupations
Personnel Training and Related Occupations
Information Communications
Materials Support
Office Occupations, Other
Programmers
Computer and Console Operators
Other Business Data Processing
Supervisory and Administrative Management

Techical

Scientific Data Processing

Trade and Industrial (T&I)

Other Public Services
Commercial Art Occupations
Quantity Food Occupations
Upholstering
Commerical Photography Occupations
Fabric Maintenance Services

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* Mixed (M) program = program in which women students enrolled nationally in 1972 comprised 25.1 to 75.0% of all enrolled students. Because of enrollment shifts, several programs would have moved from Non-traditional to Mixed, or from Traditional to Mixed since 1972. The categories have been kept constant, however, so that such changes are not obscured.

Vocational Programs Designated as Traditional for Women *

Agricultural

None

Distributive

None

Health

- Dental Assistant
- Dental Hygienist (Associate Degree)
- Nursing (Associate Degree)
- Other Nursing
- Practical (Voc.) Nursing
- Nursing Assistant (Aide)
- Occupational Therapy
- Medical Assistant
- Medical Lab. Assistant
- Rehabilitation, Other
- Radiologic, Other
- Health Aide
- Medical Lab. Techn., Other
- Surgical Technology

Home Economics, Non-Gainful

- Comprehensive Homemaking
- Child Development
- Clothing and Textiles
- Consumer Education
- Food and Nutrition

Home Economics, Non-Gainful (continued)

- Housing and Home Furnishing
- Home Management
- Other Non-gainful Consumer and Homemaking

Home Economics, Gainful

- Institutional & Home Management
- Clothing Mgt., Prod., & Services
- Home Furnishing, Eqpt., & Services
- Care and Guidance of Children
- Food Mgt., Production, & Services
- Other Occupational Preparation

Business and Office

- Filing and Office Machine Operations
- Stenographic, Secretarial, and Related Occupations
- Typing and Related Occupations

Technical

None

Trade and Industrial (T&I)

- Cosmetology
- Textile Production and Fabrication
- Other Personal Services

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* Traditional (T) program = program in which women students enrolled nationally in 1972 comprised 75.1 to 100% of all enrolled students. Because of enrollment shifts, several programs would have moved from Non-traditional to Mixed, or from Traditional to Mixed since 1972. The categories have been kept constant, however, so that such changes are not obscured.

Appendix B

Women enrolled in Non-traditional, Mixed and Traditional categories*
by occupational training area and year, United States

	1972	1976 (percent)	1978
Non-traditional: Total	5.4	8.8	11.1
Trades and Industry	5.4	7.8	9.5
Agriculture	3.9	9.6	13.1
Distributive Education	14.6	23.4	16.1
Health	0.0	0.0	0.0
Home Economics (Gainful)	0.0	0.0	0.0
Business	0.0	0.0	0.0
Technical	8.6	12.2	16.7
Mixed: Total Gainful & Non-gainful	52.8	53.1	56.8
Gainful Only	50.5	51.8	55.7
Trades and Industry	40.6	38.0	46.7
Agriculture	26.9	40.5	45.0
Distributive Education	46.3	48.7	52.2
Health	63.2	56.1	57.7
Home Economics (Gainful)	0.0	0.0	0.0
Business	56.8	57.1	60.5
Technical	31.8	46.6	46.2
Home Economics (Non-gainful)	73.8	72.8	69.8
Traditional: Total Gainful & Non-gainful	90.4	84.7	83.4
Gainful Only	86.7	85.8	85.7
Trades and Industry	87.1	85.1	86.2
Agriculture	0.0	0.0	0.0
Distributive Education	0.0	0.0	0.0
Health	90.9	89.2	89.3
Home Economics (Gainful)	86.1	84.7	82.5
Business	86.0	85.4	85.6
Technical	0.0	0.0	0.0
Home Economics (Non-gainful)	93.3	83.7	81.3

SOURCE: Based on data from U.S. Department of Health, Education, and Welfare, Bureau of Occupational and Adult Education.

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* Percentage of women enrolled in vocational education courses nationally, 1972. Non-traditional (NT) = 0.0 to 25%, Mixed (M) = 25.1% to 75.0%, Traditional (T) = 75.1% to 100%.

NUMBER AND CHANGE IN NUMBER OF TOTAL, MEN AND WOMEN STUDENTS ENROLLED IN VOCATIONAL EDUCATION (GAINFUL) 1972-78

(in thousands)*

State	Year	Number of Total Students	Number of Men Students	Number of Women Students	Number of Gain/Loss		
					All Students 1972-78	Men Students 1972-78	Women Students 1972-78
ALABAMA	1972	114.6	82.8	31.8	40.4	22.3	18.1
	1978	155.0	105.1	49.9			
CALIFORNIA	1972	1,012.4	684.3	433.2	530.4	184.3	346.1
	1978	1,542.8	763.5	779.3			
FLORIDA	1972	370.2	199.2	171.0	229.8	94.5	135.3
	1978	599.9	293.6	306.3			
GEORGIA	1972	223.1	127.8	95.3	-28.2	37.3	9.1
	1978	194.9	90.5	104.4			
IDAHO	1972	20.2	12.6	7.6	10.7	6.2	4.5
	1978	30.8	18.7	12.1			
ILLINOIS	1972	567.4	316.1	251.3	98.6	45.8	52.8
	1978	666.0	361.9	304.1			
NEW HAMPSHIRE	1972	16.5	8.7	7.8	3.1	4.0	-0.9
	1978	19.6	12.6	7.0			
NEW MEXICO	1972	35.8	16.8	19.0	1.5	3.4	-1.5
	1978	37.7	20.1	17.6			
NEW YORK	1972	546.8	266.4	280.4	230.7	83.6	147.1
	1978	777.5	349.9	427.6			
OHIO	1972	250.6	160.4	90.2	108.8	56.9	51.9
	1978	359.4	217.3	142.1			
OKLAHOMA	1972	85.4	62.4	23.0	60.8	38.8	22.0
	1978	146.3	101.3	45.0			

* Numbers may not add because of rounding

NUMBER AND CHANGE IN NUMBER OF TOTAL, MEN AND WOMEN STUDENTS ENROLLED IN VOCATIONAL EDUCATION (GAINFUL) 1972-78

(in thousands)*

State	Year	Number of Total Students	Number of Men Students	Number of Women Students	Number of Gain/Loss		
					All Students 1972-78	Men Students 1972-78	Women Students 1972-78
OREGON	1972	73.2	41.8	31.4	44.7	24.0	20.7
	1978	117.9	65.8	52.1			
PENNSYLVANIA	1972	270.8	161.2	109.6	94.5	45.7	48.8
	1978	365.3	207.0	158.3			
TEXAS	1972	349.0	267.5	81.5	209.2	83.4	125.8
	1978	558.3	351.0	207.3			
WYOMING	1972	11.0	5.3	5.7	19.5	12.9	6.5
	1978	30.4	18.1	12.3			
TOTAL 15 STATES	1972	3,982.6	2,343.8	1,638.8	1,612.8	630.3	982.5
	1978	5,595.4	2,974.1	2,621.3			
TOTAL-U.S.	1972	7,240.8	4,266.4	2,974.4	3,172.1	1,379.6	1,792.5
	1978	10,412.9	5,646.1	4,766.8			

* Numbers may not add becuase of rounding

Appendix D

Analyses of State Reports and Enrollment Data

ALABAMA

Summary Analysis

State Reports

Little evidence existed to show that Alabama had addressed the issue of sex equity in any serious way except to include the essential verbiage in the State Plan. The state was not responsive to its SACVE recommendations or to its public hearing comments.

Enrollment Data

Alabama was only slightly lower than the national level in the percent women enrolled in Non-traditional courses in 1972.. The enrollment of women in such courses did not increase much in the following years. Thus, it was significantly below the U.S. average by 1978. The number of women enrolled in Mixed courses increased, and both the number and percent of men enrolled in Consumer and Homemaking courses increased.

Analysis of Alabama State Reports

SACVE Recommendations

Need to double the efforts to attract women to historically non-traditional vocational offerings, particularly at the secondary school level.

State response. All vocational programs are available to all students.

Public Hearing Comments

Concern that more funds be budgeted; only $50,000 allocated and $17,558 expended.

State response. Other services available; no need to provide additional funds. A definite plan is followed for workshops, analyzing data, doing on-site evaluations of local school programs, communicating with interest groups, reviewing grants, and monitoring hiring procedures.

Need for child care services.

State response. Child care can be funded at the local level. Fiscal constraints make it impossible to fund at state level.

Counseling needed for displaced homemakers.

State response. Most secondary schools have counseling services available for women as well as men students.

BOAE Staff Reports

No problems related to sex equity were identified.

MERC/Q Findings

Whether state was in compliance regarding duties carried out by Sex Equity Coordinator and role of the State Advisory Council was to be determined.

Program Descriptions

Review of 565 local programs indicated the major weakness in local programs was that teachers were not aware of and had not moved to eliminate sex bias and occupational stereotyping.

Funding of up to $500 each for 14 model programs in vocational education. Two model programs to be funded from each of the seven occupational areas. (No funds, however, were actually allocated for this purpose.)

Displaced homemakers. Proposed afternoon and evening projects, short courses for job seeking skills, counseling, and some urban adult programs. (No funds.)

Budget Data

Purpose	FY '78 Allocated	FY '78 Expended
Sex Bias Personnel	$ 50,000	$ 17,588
No other funds allocated		

Women enrolled in Non-traditional, Mixed and Traditional categories*
by occupational training area and year, Alabama

	1972	1976 (percent)	1978
Non-traditional: Total	2.7	4.5	5.8
Trades and Industry	3.0	5.4	6.4
Agriculture	2.6	3.6	4.9
Distributive Education	5.7	12.6	19.5
Health	0.0	0.0	0.0
Home Economics (Gainful)	0.0	0.0	0.0
Business	0.0	0.0	0.0
Technical	0.4	1.7	2.6
Mixed: Total Gainful & Non-gainful	49.9	45.8	57.8
Gainful Only	49.3	45.5	57.7
Trades and Industry	25.7	15.5	28.1
Agriculture	38.8	38.5	44.7
Distributive Education	50.5	53.1	52.6
Health	57.5	68.5	77.8
Home Economics (Gainful)	0.0	0.0	0.0
Business	66.1	72.0	77.6
Technical	54.1	0.0	0.0
Home Economics (Non-gainful)	89.6	71.6	91.3
Traditional: Total Gainful & Non-gainful	93.8	87.7	86.3
Gainful Only	89.3	87.9	89.3
Trades and Industry	82.6	78.1	85.5
Agriculture	0.0	0.0	0.0
Distributive Education	0.0	0.0	0.0
Health	94.7	91.4	90.1
Home Economics (Gainful)	86.7	84.3	86.7
Business	90.9	90.4	90.4
Technical	0.0	0.0	0.0
Home Economics (Non-gainful)	92.2	82.2	80.7

SOURCE: Based on data from U.S. Department of Health, Education, and Welfare, Bureau of Occupational and Adult Education.

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* Percentage of women enrolled in vocational education courses nationally, 1972. Non-traditional (NT) = 0.0 to 25%, Mixed (M) = 25.1% to 75.0%, Traditional (T) = 75.1% to 100%.

Analysis of Alabama Detailed Enrollment Data, 1972-1978

Non-Traditional

Agricultural. Total loss of 10,000 students from 1972-1978; small rise in number and percent of women students:

% Women	1972	1978
Alabama	2.7%	5.8%
U.S.	5.4	11.1

Trade and Industrial. Major gain of 2,300 total students over the six years; women increased from 1,000 in 1972 to 4,000 in 1978.

Detailed programs	1972	1978
Drafting	6.8%	12.9%
Management Development	14.2	34.5
Graphic Arts	17.0	26.1

These gains are close to those made nationally in these courses.

Mixed and Traditional

Business. Expansion in numbers but not in percents. One exception, was a major increase of women in Accounting both in numbers and percent, from 70% in 1972 to 85% in 1978.

Health. Major increase of women in all courses.

Home Economics. Drop in number enrolled in Gainful courses, but a rise in number of Non-gainful courses.

CALIFORNIA

Summary Analysis

State Reports

All local educational agencies were required to give assurances annually that sex bias, sex stereotyping, and sex discrimination would not exist in any vocational education instruction or guidance programs, activities, or support services.

California required mandatory affirmative action plans from LEAs and community colleges and required that goals and timetables be established at the LEA level before funding.

The goals and timetables established by the state required that for each school no more than a specific percent of the student body be enrolled in courses with enrollments of more than 80% of one sex. This would appear to be an inappropriate performance measure, since it: 1) obscures which courses are improving the balance of their enrollments; 2) obscures whether men and/or women are moving into courses Non-traditional for their sex; 3) obscures progress which shows up in numbers but not percent; and 4) can be influenced by an increase in the number of Mixed courses without any change in the balance of enrollments in Traditional courses.

The state established monitoring procedures for LEAs and third party evaluation for all funded projects. Major funding of $753,000 was allocated for grants to overcome sex bias; an additional allocation of $150,000 was made for displaced homemaker projects. All this activity was reflected in the positive state enrollment results. If proportionately similar efforts and allocations were made in other states, similar gains might result.

An emphasis was placed on the development of comparative data on completions vs. enrollments, and dissemination of such data at the local level to the community, the students, and the vocational education staff.

In California, unlike other states, initial action for the elmination of sex bias began at the local level. Each school was required to gather and disseminate data, and to have an affirmative action plan for hiring staff and recruiting students. In addition to the local activities, state level planning and activities to eliminate bias were also carried out.

California was responsive to the SACVE recommendation, but not willing to fund day care or supportive services.

California made funds available for personnel attending sex equity workshops and programs.

Enrollment Data

California's increase of women and men in courses Traditional for the opposite sex was uniform across all occupational training areas. However, it occurred mainly between 1972 and 1976; there were relatively small changes between 1976 and 1978. Additionally, the Non-traditional courses that showed the greatest gains were predominantly the same Non-traditional courses (Drafting, Law Enforcement, etc.) that showed gains throughout the U.S., those without a strong male role image.

Analysis of California State Reports

SACVE Recommendations

The Council recommends that the State Board of Education and the Board of Community Colleges carry out an evaluation of the progress of LEAs and the community colleges in eliminating sex bias.

> State response. Greater specificity will be required before LEA plans are approved in future years. 20% of the LEAs and all the community college are being evaluated. Results are not yet available. An external evaluation of each funded project is being undertaken.

The Council recommends that more funds be available for supportive services to women.

> State response. Funds available are minimal; allocation of such funds are optional at the local level.

The Council recommends that funds be available for personnel attending workshops and other sex equity activities.

> State response. $250,000 are being allocated for this purpose.

The Council recommends that criteria be established to determine whether an LEA or community college is in compliance.

> State response. A study to determine such criteria has been funded.

Public Hearing Comments

No comments related to sex equity were identified.

BOAE Staff Reports

No sex equity issues were identified.

MERC/Q Findings

No MERC/Q was conducted for California.

State Plan

All local educational agencies were required to give assurances annually that sex bias, sex stereotyping, or sex discrimination would not exist in any vocational education instruction or guidance programs, activities, or support services. The following requirements were set forth in the State Plan:

The governing board of each local educational agency that expends funds for vocational education under this state plan should adopt an affirmative action plan for vocational education, or include a section on vocational education in an existing affirmative action plan. The plan should include but not be limited to the following:

- A written policy statement of the district's commitment to (a) equal access of all students who can profit from instruction to vocational education programs, (b) equal opportunity in employment for all qualified persons, and (c) the prohibition of discriminatory practices in vocational education staff employment based on race, national origin, sex, color, religion, age, or disability.

- A provision for determining and comparing the percent of grades 9-12 enrollment in secondary schoools or total full-time enrollment in community colleges that is minority and female enrollment in vocational education programs.

- Procedures and timetables for actively acquiring and making available for student and staff use occupational and career information that is free from racial, ethnic, disability, or sex bias.

- Procedures and timetables for actively providing minority, disabled, and female students with information about occupational opportunities and available vocational preparation, including nontraditional occupations for women.

- Procedures and timetables for comparing the percent of minority, disabled, and female enrollment in vocational education with the percent of minority, disabled and female students who complete vocational and education programs.

- Procedures and timetables for reasonable matching of the percent of minority, disabled, and female enrollment in vocational education programs with the percent of minority, disabled, and female students enrolled in grades 9-12 in secondary schools or enrolled in community colleges.

- A procedure for reporting the results of affirmative action activities annually to the local governing board, the community, the students, and the vocational education staff.

- Assignment of responsibility for implementing the plan.

- Establishment of goals and measurable objectives with a timeline for achievement of the objectives.

California, unlike the states described in the AIR study, wrote its plan in a manner such that the initial actions began with the local level. It required each local school to gather and disseminate data, and have an affirmative action plan for hiring staff and recruiting students. All state level functions were also carried out.

Program Descriptions

The following grants totalling $753,113 were awarded during 1977-78 to support sex equity activities:

To examine the feasibility of developing a training curriculum for poor and minority women to reduce barriers to employment, $65,000.

To motivate girls to prepare for math-related occupations, $15,000.

To develop instructional materials in vocational guidance with emphasis on reduction of sex bias and sex role stereotyping, $14,495.

To develop a vocational guidance and counseling model for disadvantaged women, $56,474.

To train professional staff in techniques for eliminating sex stereotyping in counseling expectant mothers, $96,500.

To eliminate sex bias and sex stereotyping in consumer and homemaking materials, $14,482.

To identify, analyze, and disseminate information about opportunities for males and females in non-traditional occupations, $43,000.

To provide personnel training to both secondary and community college staff in common areas, including elimination of sex bias, sex discrimination, and sex stereotyping, $172,449.

To develop and disseminate a resource list of community and women's organizations, educational institutions, and federally funded projects that address needs of women, $37,854.

To develop an up-to-date handbook for use by vocational education administrators and community groups in the analysis of sex bias problems and to provide training in the use of the handbook, $121,007.

To monitor state progress in eliminating sex bias and to establish a state-wide network for information exchange and a procedure for redress of sex equity grievances, $97,582.

To identify for women emerging occupations in agriculture, $19,270.

The following programs were funded to serve displaced homemakers:

To prepare participants for employment leading to managerial positions in business or public administration, $15,000.

To counsel low-income men and women, primarily single welfare recipients, $15,000.

To provide counseling and placement services, $20,000.

To identify and overcome barriers to employment; to identify existing community courses for clients, $20,000.

To provide workshops, support services, and placement for women in apprenticeships, $20,000.

To provide workshops, recruitment, assessment, support, training, $20,000.

To develop a model of linkage between college and community, providing counseling, placement, follow-up, $20,000.

To provide a comprehensive plan of service for displaced homemakers including counseling and training in non-traditional skills, $20,000.

All programs required an evaluation.

Budget Data

Purpose	FY 78 Allocated	FY 78 Expended
Support Services for Women	$ 150,000	-0-
Day Care Services	-0-	-0-
Displaced Homemakers	150,000	$ 150,000
Sex Equity Personnel	110,000	55,000
Sex Bias Grants	1,000,000	753,113

Women enrolled in Non-traditional, Mixed and Traditional categories*
by occupational training area and year, California

	1972	1976 (percent)	1978
Non-traditional: Total	5.4	15.9	15.6
Trades and Industry	3.6	12.2	12.0
Agriculture	16.9	29.9	30.0
Distributive Education	11.6	8.6	22.8
Health	0.0	0.0	0.0
Home Economics (Gainful)	0.0	0.0	0.0
Business	0.0	0.0	0.0
Technical	8.9	20.5	20.2
Mixed: Total Gainful & Non-gainful	56.2	56.1	58.5
Gainful Only	44.4	51.0	52.4
Trades and Industry	34.1	42.6	47.7
Agriculture	23.9	37.2	38.4
Distributive Education	40.9	47.9	51.5
Health	59.8	57.1	55.4
Home Economics (Gainful)	0.0	0.0	0.0
Business	49.7	55.9	55.6
Technical	19.7	40.8	31.6
Home Economics (Non-gainful)	87.8	77.7	71.1
Traditional: Total Gainful & Non-gainful	94.5	83.5	80.7
Gainful Only	96.0	84.2	83.0
Trades and Industry	90.3	88.2	86.3
Agriculture	0.0	0.0	0.0
Distributive Education	0.0	0.0	0.0
Health	93.2	89.7	88.1
Home Economics (Gainful)	88.8	84.8	84.7
Business	86.2	83.1	81.7
Technical	0.0	0.0	0.0
Home Economics (Non-gainful)	92.2	82.2	80.7

SOURCE: Based on data from U.S. Department of Health, Education, and Welfare, Bureau of Occupational and Adult Education.

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* Percentage of women enrolled in vocational education courses nationally, 1972. Non-traditional (NT) = 0.0 to 25%, Mixed (M) = 25.1% to 75.0%, Traditional (T) = 75.1% to 100%.

Analysis of California Detailed Enrollment Data, 1972-1978

Non-Traditional

California led the U.S. in 1978 in percent women enrolled in every Non-traditional occupational training area:

	1978	
	U.S.	California
Agricultural	13.1%	30.0%
Technical	16.7	20.2
Trade & Industrial	9.5	12.0
Distributive Education	16.1	22.8
Total	11.1	15.6

The number of women in Non-traditional training areas increased by more than 3 times between 1972 and 1976 (no gain between '76 and '78). The total student enrollment in Technical programs dropped; the drop was greater among men than women. In California women increased in Trade & Industrial Non-traditional courses 3.5 times between 1972 and 1978 from 13,700 to 47,800.

Agricultural. Total student enrollment increased by less than 50%; women's enrollment increased 2.5 times. California exceeded the national average for every NT Agricultural program.

Detailed programs. Major increases occurred in each program in both numbers and percent. A major exception was Agricultural Mechanics which reported 2.6% enrolled in 1972 and 6.2% in 1978, but even this was more than U.S. average in 1978.

Technical. Large increases of numbers and percentages between 1972 and 1978, similar to the national growth.

Trade & Industrial.

Detailed programs. Major gains in numbers as well as percents occurred in the following programs:

	1972	1978
Drafting	5.3%	16.7%
Electronic	6.3	13.9
Management Development	12.7	35.7
Graphic Arts	9.6	26.5
Law Enforcement	11.2	23.9

In addition, the following programs had large increases in numbers if not in percentages:

	1972	1978
Auto Mechanics	1.7%	5.8%
Woodworking	4.6	8.5
Construction, Other	2.6	4.6

Mixed and Traditional

Business

Mixed. Enrollment of women increased in numbers and percent, from 54,900 to 130,000 and from 49.7% to 55.6%.

Detailed programs

	1972	1978
Accounting and Computing	28,000	58,000
Supervisory and Administrative	4,000	15,000
Personnel	2,000	11,000

Traditional. Enrollment of women increased from 23,500 in 1972 to 310,000 in 1978 but their percent dropped from 86.2% to 81.7% because of an even greater increase in the number of men.

Health

Mixed. Numbers of women doubled but percent decreased:

Women	1972	1978
Percent	59.8%	55.4%
Number	6,400	13,500

Traditional. Major rise in numbers of women but slight drop in percent.

Distributive Education. Major rise in numbers; small rise in percent, with the following exceptions:

Detailed programs

	1972	1978
General Merchandise	48.4%	60.9%
Real Estate	31.3	41.7
Tourism	49.9	64.3
Insurance	14.8	39.3
Apparel	66.7	87.1

Trade & Industrial. One Mixed program, Quantity Foods, had a major increase in both numbers and percent.

Home Economics. Both Gainful and Non-Gainful expanded in numbers between 1972 and 1978 in both the U.S. and in California, and the drop in percentage points was virtually the same:

% Women	1972	1978
California	91.5%	80.8%
U.S.	91.6	80.7

FLORIDA

Summary Analysis

State Reports

It was difficult to analyze the Florida reports and to determine which programs were being contemplated and which were actually in progress.

Enrollment results were positive, but the activities of the state to achieve the results were difficult to ascertain.

Enrollment Data

The percentage of women in Non-traditional training was higher than the percentage in the U.S. in every program except the small Non-traditional Distributive Education program.

Florida started with a higher level of women in Non-traditional and Mixed occupational training areas in 1972 and remained in 1978 a little above the U.S. in almost all training areas.

Among all courses that are Traditional for women, only in Non-gainful Home Economics did men show a gain similar to the national increase.

The state had a generally positive picture of enrollment of women in all programs, with a major expansion in numbers, but a relatively small gain in percentages.

Analysis of Florida State Reports

SACVE Recommendations

Economically disadvantaged individuals under 20 years of age could participate in post-secondary vocational education with a minimum of financial assistance if day care services were provided.

State response. Assistance for day care will be explored.

A periodic review should be conducted of the impact of vocational and technical education on inequality.

State response. Staff has been assigned to monitor vocational education programs to ensure compliance with Title IX legislation.

Public Hearing Comments

No comments related to sex equity were identified.

BOAE Staff Report

No problems related to sex equity were identified.

MERC/Q Findings

The state is not in compliance on review of Title IX evaluations. The local Title IX self-evaluations had not been reviewed during 1978; review is underway during FY '79.

Programs Descriptions

Programs of awareness, improved counseling, job hunting skills, placement, follow-up for displaced homemakers; and establishment of community information and outreach.

Budget Data

Purpose	FY '78 Allocated	FY '78 Expended
Full-time Personnel	$50,000	$21,127
Displaced Homemakers	61,240*	6,000
Staff Development and Training for Guidance Personnel	22,847	No Data
Procurement of Personnel from Business and Industry	50,000	No Data
Elimination of Sex Bias	61,824	No Data

* Also reported as $150,000.

Women enrolled in Non-traditional, Mixed and Traditional categories[*] by occupational training area and year, Florida

	1972	1976 (percent)	1978
Non-traditional: Total	9.3	11.7	12.9
Trades and Industry	7.7	10.8	10.3
Agriculture	7.7	15.6	17.7
Distributive Education	7.2	8.4	9.7
Health	0.0	0.0	0.0
Home Economics (Gainful)	0.0	0.0	0.0
Business	0.0	0.0	0.0
Technical	16.0	12.7	18.7
Mixed: Total Gainful & Non-gainful	56.2	56.1	58.5
Gainful Only	56.0	55.3	57.7
Trades and Industry	34.3	48.0	52.0
Agriculture	15.3	27.7	30.7
Distributive Education	44.7	53.4	55.8
Health	60.1	56.6	54.8
Home Economics (Gainful)	0.0	0.0	0.0
Business	73.9	63.2	65.7
Technical	54.3	0.0	50.5
Home Economics (Non-gainful)	81.9	69.0	70.3
Traditional: Total Gainful & Non-gainful	90.6	86.2	84.0
Gainful Only	89.7	87.4	85.7
Trades and Industry	83.7	87.9	84.8
Agriculture	0.0	0.0	0.0
Distributive Education	0.0	0.0	0.0
Health	93.2	89.0	90.1
Home Economics (Gainful)	86.8	83.9	80.4
Business	90.8	88.5	87.2
Technical	0.0	0.0	0.0
Home Economics (Non-gainful)	91.1	84.2	81.3

SOURCE: Based on data from U.S. Department of Health, Education, and Welfare, Bureau of Occupational and Adult Education.

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[*] Percentage of women enrolled in vocational education courses nationally, 1972. Non-traditional (NT) = 0.0 to 25%, Mixed (M) = 25.1% to 75.0%, Traditional (T) = 75.1% to 100%.

Analysis of Florida Detailed Enrollment Data, 1972-1978

Non-Traditional

Agricultural. Major rise in numbers and percent of women:

% Women	1972	1978
Florida	7.7%	17.7%
U.S.	3.9	13.1

In all courses except Agricultural Mechanics there was a substantial rise in the numbers and percent of women in Non-traditional Agriculture.

Technical. Large expansion in numbers of both men and women. Percent women was far above national average in 1972, but increased only slightly by 1978:

% Women	1972	1978
Florida	16.0%	18.7%
U.S.	8.6	16.7

Detailed programs

	% Women	1972	1978
Police Science	Florida	10.4%	22.8%
	U.S.	9.5	24.3

Trades and Industrial. Non-traditional enrollment was high:

# Students	1972	1978
All Students	76,000	129,600
Women	4,300	10,000

Detailed programs. Auto Mechanics had a large increase in numbers of women but no increase in percent. Major gains occurred in:

	1972	1978
Drafting	6.2%	19.4%
Graphic Arts	14.8	30.9
Woodworking	5.1	17.3

Mixed and Traditional

Business

Mixed. Major expansion of numbers from 50,000 to 72,700 but a drop in percent from 73.9% in 1972 to 65.7% in 1978.

Detailed programs. Tripling of women in Accounting and Computing. Huge expansion in Supervision and Administration from 600 in 1972 to 7,100 in 1978.

Traditional. Numbers almost doubled but there was a small drop in percent. Major decrease in percent women in Typing.

Distributive Education

Mixed. Major expansion in numbers and percent:

% Women	1972	1978
Florida	44.7%	55.8%
U.S.	46.3	52.2

Detailed programs. Expansion in numbers and percent in each program except Food Distribution and Home Furnishings.

Health

Mixed. Numbers of women enrolled increased, but percent dropped.

Detailed programs. Inhalation Therapy had an increase in numbers and percent (31.7% in 1972 to 52.6% in 1978).

Traditional. Major expansion in numbers; slight drop in percent.

Home Economics. Expansion in numbers; drop in percent.

Detailed programs. Non-gainful Home Economics showed a drop in numbers and percent, similar to U.S.

% Women	1972	1978
Florida	91.1%	81.3%
U.S.	93.3	81.3

GEORGIA

Summary Analysis

State Reports

Problems were clearly identified by the SACVE, BOAE staff report, and MERC/Q but there was only one state response. The Plan showed some small effort to impact other vocational education activities, but without any commitment of funds.

Enrollment Data

Georgia showed relatively small gains in Non-traditional enrollment of women. Georgia had a major drop in Agricultural enrollment, presumably the result of courses closing, and no major increase of women in any other Non-traditional programs.

More men were enrolled in Business courses Traditional for women than were nationally, but increased enrollment of men in other courses Traditional for women showed no pattern.

There was an increase of women in Mixed Business and Health courses similar to the U.S. increase.

Analysis of Georgia State Reports[1]

SACVE Recommendations

The Council finds that recent studies indicate that a de facto system of sex stereotyping persists in Georgia's vocational schools.

The Council recommends that funds be used to increase the number of women instructors involved in training individuals for non-traditional jobs.

The Council believes that the $50,000 Federal minimum allocated for this office will be insufficient when compared to the magnitude of the task to be accomplished. It recommends that additional Federal funds (and/or a state supplement) be given to this office.

The Council recommends that funds for day care centers be included in the State plan which would make it more feasible for women to receive vocational training and find a job.

> *State response*. Senior Assistant Attorney General of the state finds that education funds cannot be used for child care. Without increased funding, the cost of supportive services would be prohibitive.
>
> No other state response.

Public Hearing Comments

No comments related to sex equity were identified.

BOAE Staff Report

Prohibition against sex discrimination has not been included in every publication. Students and applicants for staff positions are treated differently on the basis of sex.

> *Required action*. The state should undertake actions to complete the studies recommended in the Title IX self-evaluation relating to recruitment efforts and merit system lists.

MERC/Q Findings

No evidence that the requirement for monitoring hiring, firing, and promotion procedures has been carried out by the Sex Equity Coordinator, and the job description does not include this responsibility.

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[1] The FY '79 Annual Plan and FY '78 Accountability Report for Georgia were used for this analysis since those were the most recent on file in BOAE at the time of this study.

No funds were expended for special programs and placement services for displaced homemakers.

Only $17,891 of the mandated $50,000 was spent in Fiscal Year 1978; $32,109 should be carried over to Fiscal Year 1979.

Program Descriptions

Twenty-four area vocational-technical schools will participate in consumer education projects at the post-secondary and adult levels including courses for displaced homemakers in managing the dual role of homemaker/wage earner.

A minimum of one full-time Student Personnel Specialist has been employed at each area vocational-technical school to provide counseling and guidance services to those served, including displaced homemakers.

The guidance function will be enhanced by learning coordinators and by developing a curriculum free of sex role stereotyping.

An individualized instruction project has the elimination of sex bias as a major goal.

V-TECS catalogs have included a section on the elimination of sex bias.

All curriculum development projects are eliminating sexist terms and visuals.

Displaced homemakers. Programs are in planning stages only.

No special funding was made available for any of the above projects.

Budget Data

Purpose	FY '78 Allocated	FY '78 Expended
Sex Equity Personnel	$ 50,000	$ 17,891
Displaced Homemakers	98,721	-0-

**Women enrolled in Non-traditional, Mixed and Traditional categories*
by occupational training area and year, Georgia**

	1972	1976 (percent)	1978
Non-traditional: Total	5.1	4.8	8.0
Trades and Industry	6.6	5.8	8.2
Agriculture	2.9	3.2	7.4
Distributive Education	7.6	6.2	10.5
Health	0.0	0.0	0.0
Home Economics (Gainful)	0.0	0.0	0.0
Business	0.0	0.0	0.0
Technical	6.6	7.0	6.4
Mixed: Total Gainful & Non-gainful	54.7	47.6	58.3
Gainful Only	54.7	47.2	58.3
Trades and Industry	40.6	39.6	35.2
Agriculture	32.3	33.7	40.8
Distributive Education	47.7	38.8	49.7
Health	63.9	58.4	73.1
Home Economics (Gainful)	0.0	0.0	0.0
Business	59.8	58.6	73.3
Technical	12.0	48.4	63.9
Home Economics (Non-gainful)	81.0	84.9	0.0
Traditional: Total Gainful & Non-gainful	87.1	78.2	80.1
Gainful Only	81.3	79.2	78.5
Trades and Industry	78.5	73.4	63.9
Agriculture	0.0	0.0	0.0
Distributive Education	0.0	0.0	0.0
Health	87.8	85.9	100.0
Home Economics (Gainful)	92.2	88.3	86.2
Business	78.4	77.8	78.2
Technical	0.0	0.0	0.0
Home Economics (Non-gainful)	92.7	76.9	82.0

SOURCE: Based on data from U.S. Department of Health, Education, and Welfare, Bureau of Occupational and Adult Education.

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* Percentage of women enrolled in vocational education courses nationally, 1972. Non-traditional (NT) = 0.0 to 25%, Mixed (M) = 25.1% to 75.0%, Traditional (T) = 75.1% to 100%.

Analysis of Georgia Detailed Enrollment Data, 1972-1978

Non-Traditional

Agricultural. Large drop in total students enrolled from 29,000 in 1972 to 12,000 in 1978; increase in percent women was much less than U.S:

% Women	1972	1978
GA	2.9%	7.4%
U.S.	2.5	13.1

Detailed programs. Major increase of women in Forestry, almost as great as U.S:

% Women	1972	1978
GA	0.9%	11.7%
U.S.	3.9	13.2

Number of women in Agriculture Mechanics dropped; but percent rose more than the U.S.:

% Women	1972	1978
GA	1.3%	7.3%
U.S.	1.1	4.9

Technical. The program is small with little percent change from 1972 to 1978, 6.6% to 6.4%.

Trade & Industrial. Little change in numbers or percent from 1972 to 1978, 6.6% to 8.2%.

Detailed programs. Women in Auto Mechanics increased slightly in percent, 3.0% to 5.6%, and in numbers, 160 to 506. In Drafting they doubled in numbers and increased in percent, 5.8% to 17.6%.

Mixed

Business. Women increased in numbers and made major percent gains in every detailed program, much more than U.S. average:

% Women	1972	1978
GA	59.8%	73.3%
U.S.	56.8	60.5

Distributive Education. Numbers of women were down; percents unchanged.

Detailed programs. Women in Transportation increased in numbers but not in percent. In Hotel and Lodging, and Real Estate they had a major drop in numbers.

Health. Women increased in numbers and percent from 63.9% in 1972 to 73.1% in 1978.

Traditional

Business. Women increased in numbers but not percent.

Detailed programs

	% Women	1972	1978
Stenography	GA	92.7%	78.9%
	U.S.	93.2	94.0

Health. Numbers of women decreased but percent went up from 87.8% to 100.0%.

IDAHO

Summary Analysis

State Reports

Idaho was one of the few small states that actually spent as much as 86% of its funds allocated to sex equity staff. It was also one of the very few states that paid for school personnel participation in sex equity training.

The state had little on equity in its Plan, and little was required of the LEAs.

Although there was a large increase in the numbers of men enrolled in Consumer and Homemaking courses, this was not given major emphasis in the State Plan.

Enrollment Data

In almost all training areas Idaho vocational education courses remained more segregated in 1978 than national averages, with the exception of Gainful Home Economics. There was an increase of the percent of men in those courses but this still represented only a small number of men.

Although the state was still well below the levels of enrollment of women that had been achieved nationally, women made major gains in Non-traditional training from 1972 to 1976 and from 1976 to 1978.

There was an increase of men in Home Economics, both Non-gainful and Gainful.

Analysis of Idaho State Reports

SACVE Recommendations

No recommendations on sex equity were identified.

Public Hearing Comments

No comments related to sex equity were identified.

BOAE Staff Report

The Accountabililty Report does not describe the uses of funds for actions to be taken to overcome sex discrimination and sex stereotyping in state and local vocational education programs or incentives to encourage non-traditional enrollments. There is no evidence that model programs to reduce sex bias and sex stereotyping are being developed.

MERC/Q Findings

The MERC/Q was conducted, but report was not released.

Program Descriptions

Provide reimbursement for travel and per diem at state rates to persons attending special programs on sex equity.

Displaced homemakers. Fund a center at an AVTS to develop individual competencies, job/school readiness, referrals, placement, and follow-up; to be operational in 1980.

Budget Data

Purpose	FY '78 Allocated	FY '78 Expended
Sex Bias	$ 50,000	$ 43,177
Displaced Homemakers	10,000	5,000
Mini-Grants for Sex Equity	5,000	No data
Sex Equity Regional Conferences	5,000	No data

Women enrolled in Non-traditional, Mixed and Traditional categories* by occupational training area and year, Idaho

	1972	1976 (percent)	1978
Non-traditional: Total	1.9	5.7	7.4
Trades and Industry	2.8	4.1	5.3
Agriculture	1.0	8.3	10.9
Distributive Education	7.0	12.5	23.0
Health	0.0	0.0	0.0
Home Economics (Gainful)	0.0	0.0	0.0
Business	0.0	0.0	0.0
Technical	1.5	1.5	6.4
Mixed: Total Gainful & Non-gainful	58.7	60.5	58.2
Gainful Only	53.7	58.7	57.2
Trades and Industry	63.5	21.2	52.5
Agriculture	6.1	47.5	52.0
Distributive Education	48.6	50.1	51.0
Health	15.6	83.0	82.7
Home Economics (Gainful)	0.0	0.0	0.0
Business	70.9	70.0	73.8
Technical	0.0	0.0	0.0
Home Economics (Non-gainful)	94.6	83.1	70.4
Traditional: Total Gainful & Non-gainful	93.3	78.5	81.4
Gainful Only	94.0	82.2	88.3
Trades and Industry	93.7	92.1	94.7
Agriculture	0.0	0.0	0.0
Distributive Education	0.0	0.0	0.0
Health	98.5	71.5	96.8
Home Economics (Gainful)	71.0	34.6	55.3
Business	94.3	93.2	90.4
Technical	0.0	0.0	0.0
Home Economics (Non-gainful)	93.1	77.3	79.0

SOURCE: Based on data from U.S. Department of Health, Education, and Welfare, Bureau of Occupational and Adult Education.

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* Percentage of women enrolled in vocational education courses nationally, 1972. Non-traditional (NT) = 0.0 to 25%, Mixed (M) = 25.1% to 75.0%, Traditional (T) = 75.1% to 100%.

Analysis of Idaho Detailed Enrollment Data, 1972-1978

Non-Traditional

The programs were small, and relatively small gains were made in most courses.

Agricultural. Percent women increased from 1.0% in 1972 to 10.9% in 1978.

Detailed programs. Agricultural Production showed steady growth in numbers and percent of women from 0.8% in 1972 to 11.1% in 1978.

Technical. Only 3 courses enrolled women, for a total of 29 women by 1978.

Trades & Industrial. Percent women increased from 2.8% in 1972 to 5.3% in 1978, far below the national increase. The programs were small, so women's gains represented very small numbers.

Mixed

Business. Numbers and percent of women enrolled increased.

Detailed programs. Women made gains in Mixed Accounting and Computing.

ILLINOIS

Summary Analysis

State Reports

Reporting was mainly on program components. It was difficult to determine whether there were changes in institutional behavior at the state or local level. In order to evaluate this state program it should be reviewed at the local level.

Enrollment Data

Non-traditional Trade and Industrial was higher than U.S., but overall Illinois had smaller increases in Non-traditional enrollment of women than the U.S. The major gains for women were mainly in the Trade and Industrial courses in which women made gains nationally - Drafting and Law Enforcement.

Changes in Mixed enrollment were erratic, varying by both occupational training area and detailed program.

For men the major gains were in Home Economics.

Analysis of Illinois State Reports

SACVE Recommendations

No recommendations on sex equity were identified.

Public Hearing Comments

No comments related to sex equity were identified.

BOAE Staff Report

No sex equity issues were identified.

MERC/Q Findings

No MERC/Q was conducted for Illinois.

Program Descriptions

Each project assisted with funds available under the Vocational Education Act was required to include a component in its proposal dealing with evaluation of the elimination of racial and sex bias and support for equal educational opportunity in the project. The results were to be utilized in establishing the state's funding priorities:

> In-service training for state staff to develop awareness of sex bias in vocational education, and materials and techniques available to assist LEAs in eliminating sex role stereotyping.
>
> Program to acquaint counselors with the changing work patterns of women, ways of overcoming sex stereotyping, and ways of assisting girls and women in selecting careers solely on their occupational needs and interests; and to develop improved career counseling materials which are free of sex stereotyping.
>
> Resource package to assist local educational agencies in implementing in-service activities to overcome sex discrimination and sex bias. In FY 1978, project personnel focused on a needs assessment process for the design and development of the resource package. Only one phase of project funded.
>
> Development or adaptation of materials, resources, and services to LEAs to assist in overcoming sex discrimination and sex stereotyping. Projected outcome: 20 in-service programs for local educators.

Dissemination of materials to LEAs for conducting in-service activities with their staff, students, and community for eliminating sex bias in vocational education. 10 workshops to assist local educational agencies to conduct local in-service training in sex equity.

Support to LEAs which develop model exemplary programs for the elimination of sex discrimination and sex bias in vocational education.

Activities to eliminate sex stereotyping in written materials, counseling activities, and instruction of students at all educational levels.

Program to prepare occupational materials package for the elementary level, to assist in eliminating sexism from student's acquisition of occupational data. (No submission for funding.)

Grants for improved curriculum materials for new and emerging job fields, including a review and revision of any curricula developed to assure that such curricula do not reflect stereotypes based on sex, race, or national origin.

Development of curriculum, and guidance and testing materials designed to overcome sex bias in vocational education programs and support services designed to enable teachers to meet the needs of individuals enrolled in programs traditionally limited to members of the opposite sex.

Displaced homemakers. Two centers funded and operating. No detailed description.

Budget Data

Purpose	FY '78 Allocated	FY '78 Expended
Sex Equity Staff (two professionals and one support staff)	$ 50,000	$ 51,956
Displaced Homemakers	275,000	34,350
Sex Bias Grants	230,500	102,660

Women enrolled in Non-traditional, Mixed and Traditional categories[*] by occupational training area and year, Illinois

	1972	1976 (percent)	1978
Non-traditional: Total	5.9	5.8	7.1
Trades and Industry	5.9	4.9	11.0
Agriculture	3.7	11.1	9.4
Distributive Education	14.0	14.3	7.5
Health	0.0	0.0	0.0
Home Economics (Gainful)	0.0	0.0	0.0
Business	0.0	0.0	0.0
Technical	11.3	6.7	9.5
Mixed: Total Gainful & Non-gainful	49.7	49.9	52.7
Gainful Only	48.9	49.7	52.4
Trades and Industry	52.6	46.3	51.7
Agriculture	30.7	42.1	45.6
Distributive Education	41.1	46.4	48.2
Health	71.2	60.6	63.8
Home Economics (Gainful)	0.0	0.0	0.0
Business	51.0	51.5	54.3
Technical	27.6	0.0	22.2
Home Economics (Non-gainful)	64.2	74.9	68.5
Traditional: Total Gainful & Non-gainful	82.6	83.0	82.5
Gainful Only	81.7	83.1	82.5
Trades and Industry	93.6	77.2	80.7
Agriculture	0.0	0.0	0.0
Distributive Education	0.0	0.0	0.0
Health	84.8	87.8	87.4
Home Economics (Gainful)	93.1	87.0	85.1
Business	77.3	80.5	80.5
Technical	0.0	0.0	0.0
Home Economics (Non-gainful)	92.1	82.6	82.2

SOURCE: Based on data from U.S. Department of Health, Education, and Welfare, Bureau of Occupational and Adult Education.

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[*] Percentage of women enrolled in vocational education courses nationally, 1972. Non-traditional (NT) = 0.0 to 25%, Mixed (M) = 25.1% to 75.0%, Traditional (T) = 75.1% to 100%.

Analysis of Illinois Detailed Enrollment Data, 1972-1978

Non-Traditional

In 1972 the percent women enrolled was close to the national, but it did not rise by 1978 as much as the national:

% Women	1972	1978
IL	5.9%	7.1%
U.S.	5.4	11.1

Agricultural. Major rise in the percent women from 1972 to 1978, but less than the national:

% Women	1972	1978
IL	3.7%	9.4%
U.S.	3.9	13.1

Total number of students decreased by 3,000 but women increased from 1,000 to 2,400.

Detailed programs. Agricultural Production lost 6,000 total students between 1972 and 1978, but women increased from 500 to 1,300 in the same time period.

Technical. Illinois had an increase in number of women but a drop in percent of women enrolled:

% Women	1972	1978
IL	11.3%	9.5%
U.S.	8.6	16.7

Detailed programs

Architectural Technology - Percent women rose from 7.3% in 1972 to 11.7% in 1978, which was less than the national rise.

Electronic Technology - Increase in percent women was equal to national increase (0.7 to 7.3%).

Trade and Industrial. There was a large increase in percent of women enrolled with an increase of 3,500 in numbers.

Detailed programs

Drafting - Women increased in number and percent (4.8% in 1972 to 8.0% in 1978), while the number of men dropped.

Law Enforcement - Women made major gains in number and percent from 7.9% in 1972 to 27.5% in 1978.

Woodworking - Total students decreased, but the number and percent of women increased.

Mixed and Traditional

Business

Mixed. Women made a large gain in numbers, and increased slightly in percent which was in line with the national average.

Traditional. A small drop in numbers of women, mainly in Typing.

Distributive Education

Mixed. Women increased in numbers but decreased in percent.

Detailed programs. Real Estate, Recreation and Tourism had large increases in both numbers and percents.

Health. The numbers doubled by 1978 and there was a large increase of women in both Mixed and Traditional courses.

Trade and Industrial

Mixed. Women increased in Commercial Art and Photography, and dropped in both number and percent in Quantity Food.

Home Economics. Women increased in numbers and dropped in percent:

% Women	1972	1978
Gainful	93.0%	85.0%
Non-gainful	86.0	81.0

NEW HAMPSHIRE

Summary Analysis

State Reports

The most positive finding was that New Hampshire may be the first state to require knowledge of sex equity issues as part of certification for vocational education teachers. (Action was pending.)

State apparently needed to convert more ideas into action.

Enrollment Data

There was a strong increase of women enrolled in Non-traditional Agricultural, otherwise women made only small gains in Non-traditional courses. The gain in numbers of women in Trade and Industrial was mainly in programs that had major gains nationally - Graphic Arts and Drafting.

The drop in the total number of students in Traditional Business courses was an unusual occurrence, particularly with the simultaneous increase of women in Mixed Business courses.

Analysis of New Hampshire State Reports

SACVE Recommendations

No recommendations on sex equity were identified.

BOAE Staff Report

No sex equity issues were identified.

MERC/Q Findings

There is no evidence that the State Advisory Council has evaluated vocational education programs, services, and activities, including programs to overcome sex bias.

There is no evidence that the State Advisory Council has assisted the State Board in developing plans for State Board evaluations.

Although several incentives are listed in the State Plan and other incentives are in the developmental stages, no incentives were given for the development of model programs to reduce sex-bias/sex-stereotyping in training and placement.

Although a needs assessment study is in progress, no programs were funded under basic grants to provide vocational education programs for displaced homemakers or to move part-time workers to full-time employment.

State has prepared excellent instrumentation for conducting the local reviews; however, no actual evaluations of local programs have been conducted.

Based on the evidence reviewed, compliance is to be determined. Preliminary fiscal data indicates that less than $25,000 was expended on the Sex Equity Coordinator.

Program Descriptions

Displaced homemakers. Although $5,000 was allocated for this purpose, no funds were expended. The state attributed this to an inability to determine the population of displaced homemakers.

Budget Data

Purpose	FY '78 Allocated	FY '78 Expended
Sex Bias Personnel	$ 50,000	$ 20,613
Displaced Homemakers	5,000	-0-

Women enrolled in Non-traditional, Mixed and Traditional categories* by occupational training area and year, New Hampshire

	1972	1976 (percent)	1978
Non-traditional: Total	3.5	5.2	7.2
Trades and Industry	3.4	3.7	5.2
Agriculture	5.5	13.9	18.2
Distributive Education	0.0	0.0	0.0
Health	0.0	0.0	0.0
Home Economics (Gainful)	0.0	0.0	0.0
Business	0.0	0.0	0.0
Technical	0.3	2.3	7.0
Mixed: Total Gainful & Non-gainful	58.2	70.7	72.7
Gainful Only	52.1	68.6	71.4
Trades and Industry	52.2	55.2	57.6
Agriculture	25.5	25.3	37.6
Distributive Education	34.7	42.3	51.9
Health	17.8	78.2	76.0
Home Economics (Gainful)	0.0	0.0	0.0
Business	68.6	75.8	82.1
Technical	27.3	0.0	0.0
Home Economics (Non-gainful)	87.9	88.6	76.9
Traditional: Total Gainful & Non-gainful	87.7	88.3	80.9
Gainful Only	76.9	88.8	87.5
Trades and Industry	5.1	100.0	100.0
Agriculture	0.0	0.0	0.0
Distributive Education	0.0	0.0	0.0
Health	92.2	91.4	93.7
Home Economics (Gainful)	62.8	72.2	71.5
Business	90.2	90.4	96.1
Technical	0.0	0.0	0.0
Home Economics (Non-gainful)	92.5	88.0	79.5

SOURCE: Based on data from U.S. Department of Health, Education, and Welfare, Bureau of Occupational and Adult Education.

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* Percentage of women enrolled in vocational education courses nationally, 1972. Non-traditional (NT) = 0.0 to 25%, Mixed (M) = 25.1% to 75.0%, Traditional (T) = 75.1% to 100%.

Analysis of New Hampshire Enrollment Data, 1972 - 1978

Non-Traditional

Agricultural. Small enrollments, but major percentage increase:

% Women	1972	1978
N.H.	5.5%	18.2%
U.S.	3.9	13.1

Technical. Small programs with little growth.

Trade & Industrial. Large expansion in numbers; small rise in percent.

Detailed programs. Women made major gains in Drafting and Graphic Arts.

Mixed and Traditional

Business. Drop in total number of students enrolled.

Mixed. Increase in numbers of women and large increase in percent.

Detailed programs

	% Women	1972	1978
Accounting & Computing	N.H.	68.6%	82.1%
	U.S.	56.8	60.5

Traditional. Large drop in total numbers of students in Traditional Business courses from 5,753 in 1972 to 1,208 in 1978; a drop occurred in each program.

Distributive Education. Numbers of women increased from 1972 to 1978 (418 to 1,068) for Mixed courses; percent women increased sharply, nearing the national average by 1978:

% Women	1972	1978
N.H.	34.7%	51.9%
U.S.	46.3	52.2

Health

Mixed. Women made small gains in numbers but a large gain in percent because of the addition to the "Miscellaneous Health" program in 1976 of course(s) enrolling mainly women.

Traditional. Percent was unchanged; but numbers of women dropped.

Home Economics. Numbers and percents were low in both Gainful and Non-gainful compared to national data. Percent women in Traditional Gainful Home Economics increased from 1972 to 1978 from 62.8% to 71.5%; different from the national percentage which declined.

NEW MEXICO

Summary Analysis

State Reports

The MERC/Q report addressed the content and quality of the vocational program, with no apparent response from the state.

The state's response to the BOAE staff report indicated a very weak commitment to taking an active role in the elimination of sex bias.

The carryover funds from the mandated $50,000 were not expended. (The Commission on the Status of Women stated at the Denver Hearing in May, 1980 that they had requested the unexpended balances. For a minimum of three years New Mexico spent less than the $50,000 minimum required.)

Enrollment Data

Non-traditional enrollment of women was similar to U.S. data except in Trade and Industrial which was well below U.S. average. Women did increase in some Non-traditional courses which had a strong male role image.

The percent of women in Mixed programs increased by 1978, but for the Business occupations this did not represent a major change between 1972 and 1978.

Men made no gains in programs Traditional for women except in Traditional Trade and Industrial.

Analysis of New Mexico State Reports

SACVE Recommendations

Although non-traditional training areas have begun to attract students of both sexes, some resistance remains to opening up training opportunities to both sexes in non-traditional areas.

Schools which exhibit arbitrary barriers to students entering vocational programs of their choice should receive follow-up visits.

Follow-ups should involve students, parents, and other community members in developing an equal opportunity blueprint.

State staff should serve as resource personnel to assure that vocational education eventually is made available to students regardless of sex.

Given the strong feeling of local autonomy in many of the rural communities in New Mexico, little can be accomplished unless the community and the school are involved in a well planned educational process which will demonstrate why it is important to make vocational programs accessible to all students.

Public Hearing Comments

No comments related to sex equity were identified.

BOAE Staff Report

The Plan does not report on the success of its provisions to [illegible] equal access to programs by men and women.

MERC/Q Findings

Many Local Advisory Councils do not have adequate representation [illegible] women.

No evidence that programs have been developed to eliminate sex b[illegible] to provide incentives to school districts.

No displaced homemaker funds expended; no center established.

Only $38,874 budgeted for Sex Equity Coordinator; the difference should be carried over to 1979.

Placement of students who have completed vocational education has not been addressed.

Many LEA announcements, bulletins and applications do not have a non-discrimination statement.

No effort to eliminate sexist terminology and sex stereotyping examples and illustrations in curricular material is evident.

Program Descriptions

Displaced homemakers. Develop a center for displaced homemakers, teenage parents, female heads of household; special services for elderly women and other special groups, including guidance and counseling, job development and placement services, and health and legal services. One center to be established and operational by the end of Fiscal Year 1980.

Budget Data

Purpose	FY '78 Allocated	FY '78 Expended
Displaced Homemakers	$ 61,240	-0-
Sex Bias Personnel	50,000	$ 21,127
Day Care/Supportive Services	-0-	-0-
Sex Bias Grants	22,847	22,847

**Women enrolled in Non-traditional, Mixed and Traditional categories*
by occupational training area and year, New Mexico**

	1972	1976 (percent)	1978
Non-traditional: Total	2.7	12.7	10.8
Trades and Industry	3.1	6.8	5.6
Agriculture	1.2	19.3	21.2
Distributive Education	8.1	20.9	14.9
Health	0.0	0.0	0.0
Home Economics (Gainful)	0.0	0.0	0.0
Business	0.0	0.0	0.0
Technical	4.5	18.1	15.5
Mixed: Total Gainful & Non-gainful	62.5	58.4	62.8
Gainful Only	57.1	54.5	62.8
Trades and Industry	61.5	33.8	30.1
Agriculture	77.8	46.5	48.0
Distributive Education	61.3	58.3	62.6
Health	95.8	73.6	86.0
Home Economics (Gainful)	0.0	0.0	0.0
Business	39.5	53.8	75.1
Technical	0.0	0.0	59.7
Home Economics (Non-gainful)	71.0	74.2	0.0
Traditional: Total Gainful & Non-gainful	85.2	86.8	84.7
Gainful Only	85.0	89.4	89.7
Trades and Industry	97.5	96.1	92.2
Agriculture	0.0	0.0	0.0
Distributive Education	0.0	0.0	0.0
Health	87.7	89.4	87.3
Home Economics (Gainful)	85.8	73.9	78.9
Business	82.9	93.8	93.7
Technical	0.0	0.0	0.0
Home Economics (Non-gainful)	85.4	85.3	81.5

SOURCE: Based on data from U.S. Department of Health, Education, and Welfare, Bureau of Occupational and Adult Education.

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* Percentage of women enrolled in vocational education courses nationally, 1972. Non-traditional (NT) = 0.0 to 25%, Mixed (M) = 25.1% to 75.0%, Traditional (T) = 75.1% to 100%.

Analysis of New Mexico Detailed Enrollment Data, 1972-1978

Non-Traditional

Agricultural. The percent women enrolled in Agricultural courses increased more from 1972 to 1978 than the U.S. average. Number of women enrolled increased from 45 in 1972 to 1,050 in 1978:

% Women	1972	1978
NM	1.2%	21.2%
U.S.	3.9	13.1

Detailed programs. Over 90% of the women in Non-traditional Agricultural were in Agricultural Production in 1978, whereas nationally only 72% of women in Non-traditional Agricultural were in Agricultural Production.

Technical. The percent women enrolled in Technical courses increased similarly to the U.S. Number of women in Non-traditional Technical courses was very small with only 200 by 1978.

% Women	1972	1978
N.M.	4.5%	15.1%
U.S.	8.6	16.7

Trade and Industrial. The percent women enrolled in Trade and Industrial courses in New Mexico in 1978 was 5.6%, an increase from only 3.1% in 1972. In both cases percent enrollment in New Mexico was less than the national.

Detailed programs. In 1972 women were enrolled in only 5 Trade and Industrial courses; by 1978 women were enrolled in 27 courses.

Although women increased in Drafting and Graphic Arts, as they did elsewhere in the U.S., in New Mexico women also increased in Other Metal Working (25.3%), Woodworking (26.0%), and Electrical (11.3%).

Mixed

The percent of women enrolled in Mixed courses in New Mexico (62.8%) in 1978 was higher than for the U.S. (55.7%). This was particularly true for Distributive Education (62.6% vs. 52.5%), Health (86.0% vs. 57.7%), and Business (75.1% vs. 60.5%).

Distributive Education. Enrollment of women in Distributive courses doubled between 1972 and 1978 from 1,000 to 2,150.

Detailed programs. Women were concentrated in General Merchandise, Apparel and Accessories, Food Services, and Miscellaneous.

Traditional

The percent of women in Traditional courses decreased between 1972 and 1978. This was related particularly to a decrease in Traditional Trade and Industrial courses.

Trade and Industrial. Number of women in Traditional Trade and Industrial dropped from 2,100 in 1972 to 150 in 1976 to 47 in 1978 because of a drop of enrollment in Cosmetology.

Business. Percent women decreased in Typing. Total enrollment of students between 1972 and 1976 dropped from 9,700 to 500; the number of women dropped from 7,500 to 450.

Health. Enrollment of women in Traditional Health courses remained constant between 1972 and 1976 but increased between 1976 and 1978. Most of the increase occurred in Practical Nursing and Nurses' Aide courses.

NEW YORK

Summary Analysis

State Reports

In addition to the complex set of equity activities in New York, the SACVE provided more recommendations than most other SACVEs and the state responded to most of them. Even in New York, however, the state felt that funds for day care must come from the local level because of limited funds available at the state level.

A balanced variety of programs was funded at the $730,000 level by the state.

The State Plan required goals and action plans at the LEA level. The state established criteria and guidelines to assist local school personnel in improving sex equity. They required evaluation by Local Advisory Councils and established criteria for such evaluations. They promoted the hiring of professional women in administrative and supervisory positions, and of men and women for non-traditional teaching positions; and pre-service training of vocational education teachers on elimination of sex bias.

Unlike most states, New York addressed the problem of training for teenage parents.

Enrollment Data

New York had a major increase in percent women enrolled in Non-traditional courses by 1976; but there was a drop in enrollment in Trade and Industrial between 1976 and 1978 due almost entirely to the drop in the "Trade and Industrial, Other" classification. Without "Trade and Industrial, Other," the New York average was proportionately better than the U.S. All other Non-traditional courses had increases by 1978, but the major gains in New York, as in other states, were in those without a strong male role image (Drafting, Graphic Arts, Law Enforcement, etc.).

Women made major gains in Mixed training areas, particularly in Business and Health. Men made relatively small gains in courses Traditional for women except for their increase in Home Economics, Gainful and Non-gainful.

New York's enrollment data was not as positive as might have been expected based on their efforts to bring about institutional change at the state and LEA levels. The enrollment data should be watched to determine if additional gains are made in the next few years.

This is not to suggest that New York did not make progress; it did. Starting with a low level of men and women in courses Non-traditional for their sex, the state increased enrollment of women in Non-traditional and Mixed courses. The two major areas that showed relatively little change were enrollment of men in courses Traditional for women (except in Home Economics), and women in Non-traditional Trade and Industrial courses with a strong male role image.

Analysis of New York State Reports

SACVE Recommendations

The Council recommends that staff of the Women's Unit should meet with the staff of Career Education to assure that equity issues are included in planning for career education.

State response. Staff of the Women's Unit has met with staff of Career Education and has made recommendations.

The Council is concerned that no funds have been made available for child care.

State response. The state is encouraging LEAs and community colleges to make provisions for child care locally.

The Council recommends that a survey should be made of local administrators to determine what problems they are having locally in eliminating sex bias.

State response. This information has been gathered through the local action planning process. Grants have been made based on the problems identified.

The Council recommends that more data be gathered and disseminated on enrollment of students and employment of teachers and administrators in non-traditional courses.

State response. All data required by the VEA regulations are being collected and analyzed.

The Council recommends that steps to be taken to bring all units into compliance should be issued.

State response. All occupationally related instruction units are required to develop a plan of action to eliminate sex bias.

Council response. This is a good start, but other units, such as Vocational Guidance and Counseling and Career Education should also be scrutinized. Someone should be assigned to carry out this function.

The Council recommends that the funds that are assigned are inadequate to carry out the functions of the Sex Equity Coordinator.

State response. Additional funds have been made available.

Public Hearing Comments

No comments related to sex equity were identified.

MERC/Q Findings

No MERC/Q was conducted for New York.

State Plan

The following procedures established by the state emphasized a required planning procedure by the LEA which establishes both goals and an action plan before a LEA can obtain funding from the state:

- Establish goals and action plans as part of the planning process in all educational institutions in the state that promote equal opportunities for all students at all educational levels.
- Develop criteria, guidelines, and checklist, to assist in identifying sex bias and sex stereotyping in programs and funded projects to help local school personnel make improvements.
- Require local advisory council to develop criteria for evaluating programs and procedures that encourage the elimination of sex bias, sex stereotyping, and sex discrimination.
- Promote the certification and hiring of professional women in occupational education for adminstrative and supervisory positions at the state and local levels.
- Recruit women and men for non-traditional teaching positions to provide a positive role model for students.
- Assist 2 and 4 year teacher education college staff to analyze and improve the contents and approaches used in recruiting women in non-traditional programs.
- Support efforts in pre-service education to eliminate sex bias attitudes in the preparation of occupational teachers, thereby changing attitudes before they reach the classroom.
- Analyze existing and/or prepare new curriculum resources and recruiting materials that eliminate sex bias and stereotyping and show the accomplishments and contributions of women in various roles.
- Insure that funds are allocated for program activities, services, facilities, and equipment equally for females and males.
- Provide occupational training programs, counseling, special services, and job placement for teenage parents, women returning to the labor market as a result of economic need or changed marital status, women seeking jobs in non-traditional areas, single heads of households, and homemakers who work part-time and desire full-time employment.

Program Descriptions

A total of $729,678 was allocated to "Grants to Assist in Overcoming Sex Bias." Twenty-six projects received funding:

Recruit qualified area women for the Engineering and Industrial Technologies Program by developing new career awareness literature and by providing counseling, in-service seminars and tutorial and job placement services.

Provide training opportunities in non-traditional areas for women of all ages by developing and implementing special recruitment and counseling strategies.

Create awareness of non-traditional career opportunities and increased participation in such occupations through group and individual counseling, a lecture series on non-traditional career opportunities for women, and seminars on job search and employment skills.

Reduce sex bias and stereotyping in occupational education through the involvement of business and industry in work experience programs and job placement, and through curriculum revision and development.

Raise the awareness level of administrators, parents, guidance counselors, and students through pre-service and in-service activities, review of current guidance and recruitment materials, and the development of a new promotional brochure on elimination of sex bias and stereotyping in occupational education.

Conduct in three locations an in-service workshop on overcoming sex bias and stereotyping in vocational education.

Conduct statewide training of in-service teams for reducing sex stereotyping with the goal of eliminating sex stereotyped attitudes, behaviors, and expectations of secondary school personnel and adolescents, and expanding occupational and total life expectations of adolescents.

Involve teachers, guidance counselors, and administrators in a graduate credit course for teachers on sex-fair curriculum development for occupational education.

Develop and implement programs on technology for women high school students through the joint effort of guidance counselors, faculty, and local industry representatives, in order to bring about attitudinal and behavioral changes that will make technical career training a feasible choice for the students.

Develop recruitment materials to attract females to courses in engineering technologies.

Conduct activities designed to reduce sex bias and stereotyping in an attitudinal change and skill development program, in conjunction with business and industry, in order to increase the employability of women in the area.

Develop a Fishbein-type evaluation model that will predict the presence of sex-fair teaching behaviors in the classroom.

Assess current achievements of the New York City Board of Education in meeting sex equity objectives; and develop capacity for meeting these objectives in secondary and postsecondary institutions offering occupational programs, in central office occupational administration, and in vocational advisory councils.

Provide a summer secondary program in auto and electronics trades to encourage movement of women students into trades traditional for men.

Conduct a needs assessment identifying education-related needs of women who are highly motivated to return to school for engineering and computer science degrees.

Provide workshop training for 350 people statewide in GAMES (Games to Achieve the Mandate for Equality in Schools), an occupational education project for secondary school counselors and administrators involved with students making career decisions.

Eliminate sex bias in vocational youth organizations.

Conduct in-service workshops for occupational education staff designed to eliminate sex bias and stereotyping.

Expand career options for all students to reduce sex bias in the schools, K-12, by developing in couselors, teachers, and administrators the necessary awareness, knowledge, and skills.

Assist in the certification and promotion of four women candidates in educational administration through paid supervised internships and assistance in job seeking activities.

Conduct in-service courses for junior and senior high school occupational education staff in a learing center; evaluate text books and materials; meet with counselors and other staff to develop student recruitment approaches for expanded vocational roles; enroll some students in non-traditional courses; and survey learning center students and teachers to determine perceptions of teacher attitudes and sex biases.

Conduct a sex equity conference for guidance counselors and occupation education teachers, a staff training course for project participants, and group guidance sessions with 10th grade students; develop and disseminate a bias-free guidance module for use by counselors.

Centralize and update a statewide pool of qualified leaders to enhance the potential for women administrators to enter educational supervisory and management positions; develop in cooperation with the Commissioner's Statewide Advisory Council on Equal Opportunity for Women, District Superintendents, and the State Education Department's Occupational Education Special Programs.

Develop a manual for teachers and administrators for use in working with students in non-traditional job training; a manual for guidance counselors to help them help students participating in non-traditional job training; and a slide presentation and narrative in each major occupational area in which sex stereotyping prevails.

Conduct a multi-faceted career awareness program to recruit and train women for non-traditional occupations, including liaison with local employers for on-site job experiences and visitations to role models.

Displaced homemakers. Vocational Instruction and Education for Women (VIEW), a program of career counseling, job skills development, and supportive services targeted at area women who are heads of households, primary wage earners, divorced, or an ethnic minority, and are seeking career retraining.

Budget Data

Purpose	FY 1978 Allocated	FY 1978 Expended
Sex Equity Personnel	$ 50,000	50,000
Support Services to Women	-0-	-0-
Day Care	-0-	-0-
Displaced Homemakers: Post-secondary	175,000	81,000
Secondary	100,000	No data
Program Improvement and Support Services	800,000	800,000
Curriculum	1,220,000	No data

Women enrolled in Non-traditional, Mixed and Traditional categories*
by occupational training area and year, New York

	1972	1976 (percent)	1978
Non-traditional: Total	6.0	11.8	10.1
Trades and Industry	5.1	12.3	7.8
Agriculture	6.8	16.9	22.7
Distributive Education	58.9	50.0	11.8
Health	0.0	0.0	0.0
Home Economics (Gainful)	0.0	0.0	0.0
Business	0.0	0.0	0.0
Technical	7.5	7.5	13.5
Mixed: Total Gainful & Non-gainful	58.8	52.8	59.2
Gainful Only	51.8	51.2	58.4
Trades and Industry	31.9	32.1	62.0
Agriculture	23.6	53.5	57.5
Distributive Education	44.9	47.7	54.2
Health	63.6	59.7	74.0
Home Economics (Gainful)	0.0	0.0	0.0
Business	56.1	54.4	57.9
Technical	5.5	28.1	27.9
Home Economics (Non-gainful)	98.1	84.4	85.0
Traditional: Total Gainful & Non-gainful	94.3	84.4	83.8
Gainful Only	87.9	88.7	88.1
Trades and Industry	93.3	88.0	91.3
Agriculture	0.0	0.0	0.0
Distributive Education	0.0	0.0	0.0
Health	91.8	88.4	88.5
Home Economics (Gainful)	83.3	85.1	76.5
Business	86.8	89.1	88.7
Technical	0.0	0.0	0.0
Home Economics (Non-gainful)	98.1	81.5	80.5

SOURCE: Based on data from U.S. Department of Health, Education, and Welfare, Bureau of Occupational and Adult Education.

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* Percentage of women enrolled in vocational education courses nationally, 1972. Non-traditional (NT) = 0.0 to 25%, Mixed (M) = 25.1% to 75.0%, Traditional (T) = 75.1% to 100%.

Analysis of New York Detailed Enrollment Data, 1972-1978

Non-Traditional

Agricultural. The percent women enrolled in Non-traditional Agricultural courses in New York (22.7%) was much higher than that of the U.S. in 1978 (13.1%).

Enrollment of men expanded little between 1972 and 1978 (16,500 to 17,300) while enrollment of women almost quadrupled (1100 to 3900).

Expansion occured in all programs.

Technical. The percent of women enrolled in Non-traditional Technical courses increased between 1972 (7.5%) and 1978 (13.5%).

The number of women enrolled more than doubled between 1972 and 1978 (2350 to 5800).

Detailed programs. Areas of major expansion included:

	1972	1978
Architectural Technology	6.9%	13.3%
Industrial Technology	4.6	15.7
Mechanical Technolgoy	6.6	14.2
Chemical Technology	16.8	30.2

Trade and Industrial (T&I). In New York the percent women in Non-traditional Trade and Industrial increased from 5.1% to 7.8% in 1978 while the increase for the U.S. was 5.4% to 9.5%. In 1976 however, New York had 12.3 % women in Trade and Industrial while the U.S. had only 7.8%.

The number of women enrolled in Non-traditional Trade and Industrial was 3,700 in 1972, rose to 17,800 in 1976 and then decreased to 12,900 by 1978. The major cause of this decrease was a 6,000 drop from 1976 to 1978 in those enrolled in "T&I, Other" courses. Without "T&I, Other," Non-traditional Trade and Industrial in New York was 11.9% - higher than the U.S. without "T&I, Other," 8.2%:

Non-traditional T&I	1972	1976	1978
N.Y.	5.1%	12.3%	7.8%
U.S.	5.4	7.8	9.5
"T&I, Other"			
N.Y.	24.8%	68.6%	20.7%
U.S.	18.7	26.1	24.7
Non-traditional T&I without "T&I, Other"			
N.Y.	3.0%	6.3%	11.9%
U.S.	4.3	6.5	8.2

Detailed programs. The major areas of expansion were:

	1972	1978
Drafting	4.7%	12.1%
Graphic Arts	11.1	23.7
Law Enforcement	6.4	30.3

Mixed

The percent of women increased; enrollment of women in Mixed courses doubled between 1972 and 1978.

Business. Greatest expansion of enrollment was in Supervisory and Administrative Management, and Accounting and Computing.

Health. Percent women enrolled in Mixed Health (75%) was higher than U.S. (58%) in 1978.

Trade and Industrial. The percent women in Mixed Trade and Industrial in New York (62%) was much higher than for the U.S. (47%) in 1978.

Traditional

Home Economics. The only gain for men was in both Gainful and Non-gainful Home Economics.

OHIO

Summary Analysis

State Reports

Ohio's reporting system was different from other states', consisting mainly of computer printouts. Projections based on reports of the LEAs and community colleges are developed by computer. The result is a reporting system rather than a planning system. Therefore responses could not be compared to other states' planning procedures, nor was there any way to analyze the activities without additional knowledge of the system or descriptions of the programs. Appendix G of the Plan, The Report of the Sex Fair Coordinator, provided most of the information used in this study to describe the Ohio planning process.

Enrollment Data

In 1972 Ohio enrollment of women was close to the U.S. Since then, except in Agricultural, Ohio has fallen slightly behind the U.S.

In Trade and Industrial, the number of women increased in a variety of occupational training areas, but the percent women increased mainly in the courses without a strong sex role image such as Drafting and Graphic Arts.

There was a major increase of women in Mixed programs, except Health. Men increased only slightly in Home Economics.

Analysis of Ohio State Reports

SACVE Recommendations

State Board should take steps to attract women and minorities to vocational education and to eliminate all discrimination.

> State response. Efforts are going on in terms of workshops, materials, evaluation, planning, and reporting. Workshops and materials will be developed in FY 1979.

Vocational education and CETA should seek occupational preparation solutions to unemployment.

> State response. There are daily ongoing linkage between vocational education and CETA.

Public Hearing Comments

No comments related to sex equity were identified.

BOAE Staff Report

Five year plan should be revised to describe Ohio's program for displaced homemakers and other special programs.

MERC/Q Findings

No MERC/Q was conducted for Ohio.

State Plan

Each Vocational Education Planning District had a sex equity plan of action as a section of its application; it included 9 goals:

> Enrollment patterns in all vocational education programs which have 80 percent or more enrollment of one sex will be examined for indicators of sex bias, sex discrimination, and sex stereotyping.
>
> The hiring and firing of vocational personnel will be implemented according to state and Federal laws with regard to sex.
>
> Recruitment and descriptive information about vocational education programs will have statements that the program is available to all persons regardless of sex.
>
> Effective action will be taken toward recruiting both males and females into programs dominated by member of one sex.

Positive action will be taken by counselors in the state to eliminate sex bias and sex stereotyping in student selection of vocational education courses or career decision-making.

Administration, guidance, and instructional personnel will receive training in procedures and strategies in overcoming sex stereotyping and sex bias.

Cooperative and work experience programs will make agreements only with those employers who do not discriminate against employees on the basis of race, sex, or other discriminatory criteria.

Currriculum materials used in vocational education programs will be reviewed and revised for the purpose of elminiation of sex bias, sex stereotyping, and sex discrimination elements.

Job information about the programs will emphasize career opportunities for males and females.

Program Descriptions

Incentive grants were made for planning, materials development, and graduate study.

Plan expressed a need for research on effectiveness of vocational education in serving needs of urban women, minority women, bilingual women, handicapped women, Appalachian rural women, and disadvantaged women.

Budget Data

Purpose	FY '78 Allocated	FY '78 Expended
Displaced Homemakers	$103,000	$ 1,000
Support for Women	1,000	1,000
Sex Bias Eradication	2,000	2,000
Sex Equity Staff	50,000	No data

**Women enrolled in Non-traditional, Mixed and Traditional categories*
by occupational training area and year, Ohio**

	1972	1976 (percent)	1978
Non-traditional: Total	5.5	8.1	9.4
Trades and Industry	5.6	7.1	8.1
Agriculture	5.1	11.1	14.0
Distributive Education	6.3	10.3	11.5
Health	0.0	0.0	0.0
Home Economics (Gainful)	0.0	0.0	0.0
Business	0.0	0.0	0.0
Technical	5.5	8.2	11.5
Mixed: Total Gainful & Non-gainful	55.1	47.2	55.3
Gainful Only	49.6	45.6	53.7
Trades and Industry	52.7	48.0	50.7
Agriculture	43.2	56.2	62.5
Distributive Education	51.0	48.6	50.4
Health	79.9	24.6	39.8
Home Economics (Gainful)	0.0	0.0	0.0
Business	46.3	50.9	73.9
Technical	21.2	0.0	0.0
Home Economics (Non-gainful)	65.2	65.3	67.5
Traditional: Total Gainful & Non-gainful	94.1	88.3	86.7
Gainful Only	94.5	93.6	94.2
Trades and Industry	98.3	97.7	98.1
Agriculture	0.0	0.0	0.0
Distributive Education	0.0	0.0	0.0
Health	97.0	95.8	95.2
Home Economics (Gainful)	86.0	85.1	85.1
Business	95.5	95.[illegible]	97.1
Technical	0.0	0.0	0.0
Home Economics (Non-gainful)	93.9	85.6	82.6

SOURCE: Based on data from U.S. Department of Health, Education, and Welfare, Bureau of Occupational and Adult Education.

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* Percentage of women enrolled in vocational education courses nationally, 1972. Non-traditional (NT) = 0.0 to 25%, Mixed (M) = 25.1% to 75.0%, Traditional (T) = 75.1% to 100%.

Analysis of Ohio Detailed Enrollment Data, 1972-1978

Non-Traditional

Agricultural. Increase in percent women was similar to the national increase, with Ohio consistently at least one percentage point above the U.S. average.

% Women	1972	1976	1978
Ohio	5.1%	11.1%	14.0%
U.S.	3.9	9.6	13.1

Number of women increased from 1,597 in 1972 to 5,029 in 1978.

Detailed programs. Most of the increase occurred in Agricultural Production with 4,300 women (14.8%) by 1978.

Technical. Numbers of total students were small and dropped from 1972 to 1978. The numbers of women increased by 1978 but still were small, particularly in the light of the large number of total students enrolled in vocational education in Ohio.

Trade and Industrial. Increase in percent women enrolled in Ohio was less than the increase in the U.S.:

% Women	1972	1978
Ohio	5.6%	8.1%
U.S.	5.4	9.5

Number of women increased from 5,100 in 1972 to 11,215 in 1978.

Detailed programs. Major increases in percent women occurred in Other Construction (14.4%), Custodial Services (47.5%), Drafting (17.4%), Graphic Arts (29.3%), Law Enforcement (10.9%), and Trade and Industrial Other (27.1%). Machine Shop (4.1%), Electrical Occupations (4.1%), and Firefighter Training (1.4%) increased in numbers, but percents remained low.

Mixed and Traditional

The number of women in Mixed courses increased greatly from 1972 (34,200) to 1976 (59,500) and then dropped slightly by 1978 (55,000). This decrease occurred mainly in Distributive and Business Education.

The percent women enrolled in Traditional courses in Ohio by 1978 (94.2%) was considerably greater than in the U.S. (85.7%).

Women's enrollment in Traditional courses was similar to the pattern in Mixed courses. Enrollment nearly doubled between 1972 and 1976 but decreased slightly between 1976 and 1978.

Mixed

Business. In 1978 the percent of women enrolled in Mixed Business in Ohio (73.9%) was greater than in the U.S. (60.5%).

Detailed programs. In 1972, the U.S. percents of women in the two largest Mixed Business programs were higher than the Ohio percents, but by 1978 Ohio's were much higher than the U.S. averages.

	% Women	1972	1978
Accounting & Computing	Ohio	49.3%	78.2%
	U.S.	59.8	66.1
Business Data Processing	Ohio	41.2%	73.3%
	U.S.	49.0	62.4

Distributive Education. The percent of women enrolled in Mixed Distributive Education courses remained the same in 1972 and 1978. However, the total number of students peaked in 1972 and dropped by 1978.

Health. In 1978 the percent women enrolled in Ohio (39.8%) was considerably less than the U.S. (57.7%).

Number of women in Mixed Health courses increased greatly between 1972 and 1976 and again slightly between 1976 and 1978.

Trade and Industrial. Number of women in Trade and Industrial Mixed courses continued to increase from 1972 to 1978.

Home Economics. In both Gainful and Non-gainful Home Economics courses the percent women decreased between 1972 and 1978. The numbers of both men and women increased only slightly.

OKLAHOMA

Summary Analysis

State Reports

The State Plan was practical and persuasive. A planning and priority system was established based on careful data analysis of relevant performance factors. On the basis of the Plan, the enrollment data could have been expected to reflect more gains for women than they did.

Funds were expended on the Sex Equity Coordinator; some were to be expended on programs as well. A displaced homemaker program was supported by a state law, and expected to be operational in 1980.

Enrollment Data

Women's gains in Non-traditional courses were greatest in Trade and Industrial courses in which they did not make appreciable gains nationally. Although there were gains in Agricultural, the state's average was very low in 1972 and still well below the national average in 1978. There were no gains in Technical courses although Oklahoma was slightly above the national average in 1972.

Women were above the national average in Mixed programs. There were no gains for men in programs Traditional for women.

Analysis of Oklahoma State Reports

SACVE Recommendations

Recommended support services to encourage more women to participate in non-traditional programs.

> State response. A number of support services for women, day care services, and special services for homemakers are currently available in the regular programs of instruction. Programming in these categories was limited due to limited resources.

Public Hearing Comments

No comments related to sex equity were identified.

BOAE Staff Report

No sex equity issues were identified.

MERC/Q Findings

No MERC/Q was conducted for Oklahoma.

State Plan

Established a system for analyzing male/female enrollment, and established priorities and programs based on that analysis. Enrollment was to be aggregated by sex, by type of institution, by level, by program area, and by economic region. This data was to be analyzed to determine if statistically significant changes in enrollment patterns by sex had occurred; whether change was greater in rural or urban area, in AVTS or comprehensive high schools, for adults or secondary students, for men or women; and in which programmatic areas change occurred.

The Plan reported that a review of the initial 1977-1978 enrollment indicated minor changes in male/female enrollment. There appeared to be a higher increase in non-traditional enrollments in comprehensive high schools than in area schools, and a slightly higher increase in non-traditional enrollments in urban areas.

The Plan noted that answers to these questions would provide direction for personnel charged with assisting the State Board in eliminating sex bias and sex role stereotyping in vocational programs.

Program Descriptions

Although no sex bias studies were funded, proposals for research in identifying sex barriers were prepared and presented to the State Advisory Council.

Several schools established local model programs and were sharing their experience with other schools through state department staff. No supplemental monies were expended.

Displaced homemakers. A displaced homemaker bill was passed and signed by the Governor on March 29, 1978. The state department issued a request for a pilot multipurpose service center for displaced homemakers, to be funded in FY '80.

Budget Data

Purpose	FY '78 Allocated*	FY'78 Expended
Full-time Personnel	$ 50,000	$ 52,031
Displaced Homemakers	5,000	-0-
LEA Model Projects	20,000	-0-
Incentives to LEAs	10,000	1,900
Guidance and Counseling	33,153	-0-
Parenthood Education	5,000	-0-

* Annual projects from the five year plan.

Women enrolled in Non-traditional, Mixed and Traditional categories* by occupational training area and year, Oklahoma

	1972	1976 (percent)	1978
Non-traditional: Total	5.0	5.4	9.0
Trades and Industry	7.2	5.8	9.8
Agriculture	1.2	3.9	7.4
Distributive Education	15.9	6.6	11.0
Health	0.0	0.0	0.0
Home Economics (Gainful)	0.0	0.0	0.0
Business	0.0	0.0	0.0
Technical	9.8	9.1	10.0
Mixed: Total Gainful & Non-gainful	55.2	50.5	58.2
Gainful Only	54.9	51.9	61.5
Trades and Industry	44.3	51.0	57.2
Agriculture	17.7	39.7	32.9
Distributive Education	56.3	52.6	60.0
Health	88.5	62.0	65.0
Home Economics (Gainful)	0.0	0.0	0.0
Business	46.8	51.3	70.3
Technical	11.9	33.0	34.8
Home Economics (Non-gainful)	74.3	42.8	46.0
Traditional: Total Gainful & Non-gainful	94.4	94.6	93.8
Gainful Only	92.3	91.7	93.4
Trades and Industry	91.5	94.3	95.7
Agriculture	0.0	0.0	0.0
Distributive Education	0.0	0.0	0.0
Health	91.3	89.6	92.7
Home Economics (Gainful)	90.7	90.6	89.4
Business	93.6	93.3	95.9
Technical	0.0	0.0	0.0
Home Economics (Non-gainful)	95.3	96.7	94.1

SOURCE: Based on data from U.S. Department of Health, Education, and Welfare, Bureau of Occupational and Adult Education.

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* Percentage of women enrolled in vocational education courses nationally, 1972. Non-traditional (NT) = 0.0 to 25%, Mixed (M) = 25.1% to 75.0%, Traditional (T) = 75.1% to 100%.

Analysis of Oklahoma Detailed Enrollment Data, 1972-1978

Non-Traditional

Agricultural. Increase in percent of women enrolled was less than the national increase and the percent of women enrolled was substantially lower than the national percent in all three years, 1972, 1976, and 1978.

Enrollment of women went from 280 in 1972, to 1,167 in 1976, to 2,600 in 1978.

Detailed programs. Increases of women occurred in every program except Forestry with the bulk of the increase in Agricultural Production.

Technical. Percent of women in Non-traditional Technical courses was virtually the same in 1972 (9.8%) and 1978 (10.0%) while nationally the percent of women in Non-traditional Technical courses rose continually (8.6% to 16.7%).

The actual number of women enrolled was small; it increased from 480 in 1972 to 681 in 1976 and then decreased to 263 in 1978. At the same time, enrollment of men increased from 4200 in 1972 to 7,500 in 1976 and then also dropped to 2,500 in 1978.

Detailed programs. By 1978 three out of four women in Non-traditional Techical courses were in Police Science.

Trade & Industrial. Although the national percent of women increased continually (5.4% to 9.5%), in Oklahoma the percent of women decreased between 1972 (7.2%) and 1976 (5.8%). The percent of women then increased 4 points between 1976 (5.8%) and 1978 (9.8%) even though male enrollment increased an additional 25,000. Enrollment of women went from 2,000 in 1972 to 6,100 in 1978.

Detailed programs. Half of the increase which occurred between 1976 and 1978 was in Electrical Occupations where enrollment of women increased by 2,400. Enrollment of women increased by 100 or more in 10 other courses.

Mixed

The percent women enrolled in Mixed courses increased from 54.9% in 1972 to 61.5% in 1978. This pattern was similar to the national increase from 40.6% to 46.7%, but the representation of women was much higher in Oklahoma. Enrollment of women in Mixed courses increased steadily from 1972 to 1978 (7,300 to 15,600).

Business. Increase of women in Mixed Business occurred almost exclusively in Accounting and Computing.

Health. Enrollment of women decreased from 1,300 in 1972 to 600 in 1978. Enrollment of men in Mixed Health also decreased.

Traditional

Total number of students in Non-gainful Home Economics tripled between 1972 and 1978. The increase occurred in Institutional and Home Management, Care and Guidance of Children, and Food Management, Production and Services. Enrollment of women in Non-gainful Home Economics decreased only slightly from 30,500 in 1972 to 26,000 in 1978; the major decrease in enrollment occurred prior to 1976. The percent women enrolled remained the same.

OREGON

Summary Analysis

State Reports

Although the MERC/Q raised several issues of non-compliance, Oregon was apparently committed to sex equity. Still missing were specific provisions requiring programs at the local level.

If the knowledge gained from the SACVE study is applied, it should prove useful to Oregon and to other states as well.

Enrollment Data

The state had a relatively high percent of women enrolled in 1972. It was still above the national average in 1978, but the only major increase between 1972 and 1978 was in Agricultural.

There was a decrease of women in all Mixed programs and a particularly large decrease of women in Mixed Business courses.

Men made major gains in programs Traditional for women; this was particularly true for Non-gainful Home Economics. The large increase in numbers of men in all courses affected the percents of women enrolled in Oregon.

Analysis of Oregon State Reports

SACVE Recommendations

There are no role models in the schools to assist in reducing sex bias. State should encourage training and placement of qualified men and women vocational instructors in non-traditional areas.

SACVE undertook a study at the public hearing to determine whether the Annual and the Five Year State Plans were achieving their intended purposes. The study found that of the vocational teachers and administrators interviewed, 37% were not familiar with the State Plan, 29% had only a vague understanding of its contents, and 34% who were familiar with the Plan mentioned a number of problems:

- Goals are too general;
- Not relevant to many curricula;
- Too much emphasis on disadvantaged, handicapped, and women; and too many restrictions;
- Too idealistic; and
- No enough copies distributed.

General administrators, Advisory Council members, employers, and Board members who were interviewed were even less familiar, as a group, with the Annual Plan than vocational teachers and administrators. Fifty-seven percent indicated they had not heard of the Plan and 18% were only vaguely familiar with it.

Most of the respondents perferred passive provision of equal opportunity to active recruitment of students into non-traditional occupations. They based this preference on: (1) community pressures and values, (2) student values, and (3) difficulty in offering a realistic schedule of courses for both sexes. The following improvements were suggested:

- Eliminate sex bias in textbook materials.
- Require teachers to develop goals related to non-traditional education in their work plans.
- Require attendance of vocational instructors at workshops which explain problems of sex equity.
- Make students, particulary eighth grade students, more aware of employment opportunities in non-traditional fields.
- Publicize the advantages of entering non-traditional careers, and reduce the stigma associated with this type of choice.

- Improve guidance and couseling, especially at junior high and elementary school levels.
- Provide opportunities for students to see members of their own sex working in non-traditional occupations.

Public Hearing Comments

(Sex equity received specific emphasis in public notices of the hearing). Concern was expressed regarding the insufficient preparation of vocational instructors in the area of sex equity and regarding the insufficient efforts being made to recruit women into non-traditional occupational areas.

BOAE Staff Report

No sex equity issues were identified.

MERC/Q Findings

Increased information on progress toward sex equity should be provided to National and State Advisory Councils on Vocational Education. State Advisory Council should evaluate vocational education programs to overcome sex bias. No evidence that state has addressed problems identified as a result of its Title IX self-evaluation. Insufficient evidence of state compliance.

Program Descriptions

A project on elimination of sex bias for ABE students was approved.

Projects projected in 1978 included elimination of sex bias in guidance and counseling at secondary and post-secondary levels.

Displaced homemakers. Post-secondary education agencies to provide training, employment, and placement services for displaced homemakers.

Budget Data

Purpose	FY '78 Allocated	FY '78 Expended
Day Care Services	-0-	-0-
Support Services	$ 18,000	$ 47,458
Sex Bias Personnel	50,000	30,382
Guidance and Counseling	20,000	No data

Women enrolled in Non-traditional, Mixed and Traditional categories*
by occupational training area and year, Oregon

	1972	1976 (percent)	1978
Non-traditional: Total	12.0	10.4	14.0
Trades and Industry	13.6	8.6	13.3
Agriculture	9.8	21.7	24.2
Distributive Education	1.6	9.0	0.0
Health	0.0	0.0	0.0
Home Economics (Gainful)	0.0	0.0	0.0
Business	0.0	0.0	0.0
Technical	3.7	8.5	8.4
Mixed: Total Gainful & Non-gainful	54.2	54.9	50.7
Gainful Only	54.2	54.9	50.7
Trades and Industry	42.4	58.5	65.6
Agriculture	29.2	36.6	43.7
Distributive Education	44.4	56.7	47.4
Health	15.6	48.9	55.1
Home Economics (Gainful)	0.0	0.0	0.0
Business	63.0	55.8	53.2
Technical	0.0	0.0	0.0
Home Economics (Non-gainful)	0.0	0.0	73.9
Traditional: Total Gainful & Non-gainful	89.5	90.8	75.6
Gainful Only	86.8	83.7	80.9
Trades and Industry	78.9	82.1	53.1
Agriculture	0.0	0.0	0.0
Distributive Education	0.0	0.0	0.0
Health	98.4	92.2	86.5
Home Economics (Gainful)	75.2	78.8	76.3
Business	87.7	83.1	82.2
Technical	0.0	0.0	0.0
Home Economics (Non-gainful)	90.6	95.0	72.0

SOURCE: Based on data from U.S. Department of Health, Education, and Welfare, Bureau of Occupational and Adult Education.

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* Percentage of women enrolled in vocational education courses nationally, 1972. Non-traditional (NT) = 0.0 to 25%, Mixed (M) = 25.1% to 75.0%, Traditional (T) = 75.1% to 100%.

Analysis of Oregon Detailed Enrollment Data, 1972-1978

Non-Traditional

Agricultural. The national percent of women enrollees increased from 3.9% in 1972 to 13.1% in 1978, but in Oregon the percent women was 9.8% in 1972 and rose to 24.2% by 1978. Number of women enrolled went from 468 in 1972 to 1,523 in 1978.

Technical. Percent women enrolled in Non-traditional Technical courses in Oregon increased from 3.7% (1972) to 8.5% (1976) with no increase thereafter, while nationally, percent women increased from 8.6% (1972), to 12.2% (1976), and to 16.7% (1978).

Detailed programs. Major increase was in Electronic Technology.

Trade and Industrial. The percent of women enrollees was virtually unchanged from 13.6% (1972) to 13.3% (1978). The national percent increased from 5.3% (1972) to 9.5% (1978).

Number of women enrolled went from 3,707 (1972) to 4,944 (1978). Increases occurred in the same large courses as was true nationally.

Mixed

Number of women enrolled in Mixed courses in Oregon expanded from 8,700 (1972) to 16,700 (1978).

Business. The reduction of percent women in Mixed Business was entirely the result of an increase in the total number of students from 9,000 (1972) to 15,400 (1978) while women increased from 5,700 (1972) to 8,200 (1978).

Percent women enrolled in Mixed Business courses in Oregon declined from 63.0% (1972) to 53.2% (1978) while nationally the percent women enrolled in Mixed Business courses increased from 56.8% (1972) to 60.5% (1978).

Detailed programs. Most of the women enrolled in Mixed Business in 1978 were in Accounting and Computing, and Supervisory and Administrative Management.

Distributive Education. Most of the women enrolled in Mixed Distributive Education in 1978 were in Finance and Credit, Real Estate, and Miscellaneous Distributive courses.

Health. Nationally the percent women enrolled in Mixed Health courses declined from 63.2% (1972) to 57.7% (1978). In 1972, in Oregon, the percent women enrolled in Mixed Health, 15.6%, was substantially below the national percent but by 1978, Oregon had increased to 55.1%, nearly equal to the national.

Trade and Industrial. Percent women enrolled in Mixed Trade and Industrial increased more rapidly and consistently from 1972 to 1976 and 1978 (42.4%, 58.5%, 65.6%) than was true of the national (40.6%, 38.0%, 46.7%). Total number of students fell in 1978 to 1972 level of 1,000 after it had increased to 3,500 in 1976.

Traditional

In Oregon the enrollment of women in Traditional courses increased from 18,300 (1972) to 28,400 (1978). Every detailed program showed a similar proportional increase. All decreases in the percent women in Traditional courses, with the exception of Traditional Trade and Industrial, were the result of an increase in enrollment of men rather than a decrease in enrollment of women.

Home Economics . There was a large reduction from 1972 to 1978 in both total number (45,900 to 37,000) and percent (90.6% to 72.0%) of women enrolled in Non-gainful Home Economics.

PENNSYLVANIA

Summary Analysis

State Reports

Because there was little program description, it was difficult to be certain what programs were being operated, and how the state had responded to suggestions of the SACVE, public hearing, and MERC/Q. Further investigation is needed at the state level.

Enrollment Data

Pennsylvania's patterns of Non-traditional enrollment were similar to those of the U.S., but in most cases Pennsylvania had not advanced as much.

Pennsylvania had a slightly lower percent of women in Non-traditional courses than the U.S. and showed few relative gains since 1976. Women in Pennsylvania made their greatest gains in the Mixed programs. There was a marked increase, greater than the U.S., in Mixed programs between 1972 and 1976, with an increase in all occupational training areas except Health.

Except for Non-gainful Home Economics, the percent of men enrolled in courses Traditional for women changed very little. This pattern was similar to the U.S. except that the percent of women in these courses was higher in Pennsylvania than in the nation.

The percents of women in Non-traditional programs and of men in programs Traditional for women were lower than those achieved nationally.

Analysis of Pennsylvania State Reports

SACVE Recommendations

The Council is concerned about the slow gains being made on enrollment of men and women in courses that are not traditional for their sex. They also question whether the resources assigned to sex equity by the state are adequate for so ambitious a program.

Public Hearing Comments

The Pennsylvania Commission for Women questioned whether one Sex Equity Coordinator could undertake the gigantic task of initiating the activities specified for the 1979-80 sex equity plan. They also stated that the plan would be more meaningful if priorities were indicated, including the financial, human, and physical resources allocated to each activity.

> State response. The Sex Equity Coordinator will have the assistance of several State Department of Education (PDE) offices in carrying out the sex equity program. These include the Bureau of Vocational Education, the Research Coordinating Unit, Office of Higher Education as well as staff of the Bureau of Equal Educational Opportunity.

Incentives should be offered to encourage enrollment of both women and men in Non-traditional programs and development of model programs to reduce sex stereotyping.

> State response. The Federal law encourages the use of incentives but it is mute on accepted practices of specific incentives. Funds are available on a project basis in the areas of research, guidance, teacher education, exemplary, etc. Sex equity activities are an identified priority for these funds. Monetary awards to individuals are inappropriate. However, an effort is being made to develop additional incentives for inclusion in the annual plan.

BOAE Staff Report

No sex equity issues were identified.

MERC/Q Findings

Personnel did not assist State Board in publicizing public hearings. State moving into compliance.

No evidence that Title IX evaluations were reviewed.

No evidence that state has attempted to correct problems revealed by LEAs' Title IX self-evaluation process, or to make complaint process known.

Sex Equity Coordinator did not review distribution of grants and contracts at post-secondary and secondary level for sex bias, and did not review apprenticeship programs.

No evidence that Sex Equity Coordinator was monitoring hiring and promotion process to assure elimination of sex bias.

No evidence of priority given to exemplary and innovative programs that address sex equity. No evidence that proposals are reviewed to assure responsiveness to the issues.

No statement in brochures or announcements that the state and LEAs would not discriminate in enrollment or employment of teachers and administrators.

Program Descriptions

Development of pre-service and in-service teacher training programs to enable homemaking teachers to eliminate sex bias. Five workshops held.

Displaced homemakers. Federal funds totalling $100,000* have been budgeted for developing, promoting, and providing services for displaced homemakers. Thirteen programs to assess and meet the needs of displaced homemakers were reviewed and funded. No descriptions of the programs were included.

Budget Data

Purpose	FY '78 Allocated	FY'78 Expended
Sex Bias Activity	$ 50,000	$ 50,000
Sex Equity	10,142	No data
Displaced Homemakers	52,965*	10,142
Sex Bias & Discrimination	65,000	No data

* Figures are reported as cited in the particular section of the of the document referenced.

Women enrolled in Non-traditional, Mixed and Traditional categories* by occupational training area and year, Pennsylvania

	1972	1976 (percent)	1978
Non-traditional: Total	3.7	9.2	9.6
Trades and Industry	2.9	9.0	7.9
Agriculture	3.7	9.0	10.3
Distributive Education	0.0	0.0	24.6
Health	0.0	0.0	0.0
Home Economics (Gainful)	0.0	0.0	0.0
Business	0.0	0.0	0.0
Technical	8.1	10.7	18.8
Mixed: Total Gainful & Non-gainful	50.8	65.2	63.6
Gainful Only	50.3	65.2	63.6
Trades and Industry	30.5	58.2	61.7
Agriculture	49.2	64.6	65.2
Distributive Education	61.1	59.0	61.1
Health	67.6	56.9	51.9
Home Economics (Gainful)	0.0	0.0	0.0
Business	63.0	70.3	65.7
Technical	48.3	67.7	72.6
Home Economics (Non-gainful)	68.9	42.1	55.9
Traditional: Total Gainful & Non-gainful	91.0	85.8	86.3
Gainful Only	89.7	88.2	90.3
Trades and Industry	89.5	92.6	91.6
Agriculture	0.0	0.0	0.0
Distributive Education	0.0	0.0	0.0
Health	95.6	81.9	95.2
Home Economics (Gainful)	73.3	76.2	75.5
Business	90.9	91.0	91.2
Technical	0.0	0.0	0.0
Home Economics (Non-gainful)	92.9	82.3	80.8

SOURCE: Based on data from U.S. Department of Health, Education, and Welfare, Bureau of Occupational and Adult Education.

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* Percentage of women enrolled in vocational education courses nationally, 1972. Non-traditional (NT) = 0.0 to 25%, Mixed (M) = 25.1% to 75.0%, Traditional (T) = 75.1% to 100%.

Analysis of Pennsylvania Detailed Enrollment Data, 1972 - 1978

Non-Traditional

Agricultural. The number of all students enrolled increased from 12,500 in 1972 to 18,000 in 1978; the number of women from 450 to 1900. The percent women enrolled in Pennsylvania increased from 3.7% to 10.3%, less than the increase of women enrolled nationally (3.9% to 13.1%). Enrollment of women increased in all courses as was true of national enrollment.

Technical. Pennsylvania's increase in the percent women in Non-traditional Technical courses was similar to the national:

% Women	1972	1978
PA	8.1%	19.8%
U.S.	8.6	16.7

Enrollment of women increased from 1,300 (1972) to 4,700 (1978).

Trade and Industrial (T&I). Although there was a steady increase in the percent of women in Non-traditional T&I nationally from 1972 to 1978, in Pennsylvania there was an increase in the percent of women in T&I between 1972 and 1976 but a decrease between 1976 (9.0%) and 1978 (7.9%).

The enrollment of women expanded continually from 2,800 (1972) to 9,000 (1976) to 11,500 (1978), but this was offset by an even greater expansion of men from 111,000 to 121,000.

Detailed programs. Major increases occurred in:

	1972	1978
Auto mechanics	5.2%	8.7%
Carpentry	1.8	4.1
Drafting	3.8	13.5
Electronics	3.8	8.5
Management Development	9.8	30.6
Graphic Arts	10.5	31.4
Law Enforcement	0.4	35.4
Woodworking	9.7	20.1

Mixed & Traditional

The percent women enrolled in Mixed courses in Pennsylvania in 1978 (63.6%) was greater than the U.S., and the percent in each training area was greater except in Mixed Health courses.

The total enrollment of women in Mixed courses expanded in Pennsylvania between 1972 and 1978, more from 1976 to 1978 than 1972 to 1976. This was true for each occupational training area.

The percent of women enrolled in Traditional courses did not decrease in Pennsylvania except in Home Economics.

Business

Mixed. Both the percent and the number of women in Mixed Business courses increased from 1972 to 1978. Total enrollments also rose continually, though more slowly from 1976 to 1978. The percent of women increased in each Mixed detailed program except "Office Occupations, Other" by 1978.

Traditional. Enrollment of women in Traditional courses in Pennsylvania increased from 121,000 in 1972 to 160,000 in 1976 and decreased slightly to 153,000 by 1978.

Distributive Education.

Mixed. The pattern established for Mixed Business was true for Mixed Distributive Education. There was a small increase in number and percentage of women in almost all detailed programs except Real Estate, Insurance, and Transportation.

Health

Mixed. The major expansion in women's enrollment in Mixed Health occurred between 1976 and 1978 when it more than doubled (as did total student enrollment).

Trade and Industrial

Mixed. Enrollment of women in Mixed Trade and Industrial dropped considerably between 1972 and 1976 due to a large decrease in enrollment in the "Other Public Services" courses. Enrollment increased again between 1976 and 1978.

Traditional. Enrollment of women in Traditional Trade and Industrial increased rapidly from 1972 to 1976 but hardly at all from 1976 to 1978.

Home Economics. Enrollment of women in Consumer and Home Economics increased from 1972 to 1976 and decreased very slightly from 1976 to 1978. The percent women enrolled decreased throughout the period from 1972 to 1978.

TEXAS

Summary Analysis

State Reports

Funds beyond those for the Sex Equity Coordinator and displaced homemakers were allocated by the state, but the actual expenditures were lower than the allocations.

Perhaps the most interesting effort in Texas was the establishment of enrollment goals to be reached each year, although the goals projected minimal gains. Results of these enrollment goals indicated improvement in sex equity in the state, but the only way that the state could accomplish the goals was through performance at the LEA level. However there was no evidence that the state goals had been specifically applied to LEAs.

Enrollment Data

In Texas percent of women enrolled increased in every Non-traditonal occupational training area, except Trade and Industrial. This was because of a particularly large increase in the number of women enrolled. Texas had major increases of women in Non-traditional courses, including Trade and Industrial courses, that did not have increases in most other states in the U.S.

Women increased in all Mixed occupational training areas, except Mixed Health where men made greater gains. Increases in enrollment of men in courses Traditional for women was almost entirely in Home Economics, and to a lesser degree in Traditional Trade and Industry.

Analysis of Texas State Reports

SACVE Recommendations

No sex equity issues were identified.

Public Hearing Comments

The State Board should make funds availabe to support activities to eliminate sex bias and follow up these activities to ensure that funds so identified are actually spent.

> State response. Funds are available to support activities to eliminate sex bias and sex stereotyping. The law and regulations do not mandate any specific expenditure of funds except the $50,000 to support the functions of the full-time personnel. In FY 1978, $50,000 was allocated; in FY 1979, $60,459; in FY 1980, $66,022. The minimum has been exceeded.

A pilot program should be undertaken to encourage women vocational educators to enter welding; 30 classes for women were started but none of the vocational education teachers were women.

BOAE Staff Report

State's program of incentives to develop model programs to reduce sex bias is inadequate.

> Required action. Describe incentive package currently available, and insure that LEAs are aware of the program.

Results of activities to reduce sex stereotyping in vocational education by the sex equity coordinator and others are not reported. A list of activities in this area does not adequately comply with the regulations.

> Required action. Rewrite the results section to include what impact these activities had on reducing sex bias, stereotyping and discrimination. Also include the results of the incentive program as well as the results of the displaced homemaker program.

There has been no update of the functions of the Sex Equity Coordinator. A review of self-evaluations required by Title IX was lacking in the description of functions.

> Required action. Update the Five-Year Plan to include in it the list of functions to be performed by the sex equity personnel.

MERC/Q Findings

No MERC/Q was conducted for Texas.

State Plan

Enrollment goals were established at the secondary, postsecondary, and adult levels. Results of goals for 1979 were reported; new goals for 1980 were established. Goals were established for percent enrollment of men and women in several occupational training areas at secondary, postsecondary and adult levels. The goals for 1980, however, offered little advancement over the results of 1979. (See Goals Table following.)

Program Descriptions

The development of vocational counseling materials for use in the women's support services program. This project resulted in the development of the film "Breakout," which deals with recruitment by counselors.

An analysis of problems as perceived by male students in vocational homemaking education programs in order to improve teaching techniques or curriuculum development. These will be used in a substantial number of secondary and postsecondary classrooms.

Exemplary program for recruitment into non-traditional careers. A project to explore such areas as barriers to entrance into non-traditional careers, useful recruitment methods, and influencing occupational choice. Recruitment materials were developed and recommendations were made for statewide recruitment activities.

Minicourses to explore non-traditional career fields; lab courses to give individuals an opportunity to experience areas of employment previously traditional for the opposite sex.

Utilization of a model to create awareness of sex bias and sex stereotyping in vocational education. This project provided information concerning the effectiveness of the workshop approach to the solution of the problem of sex bias and sex stereotyping.

Training of child care providers to use a nonsexist approach to child development. Material packets were developed including suggested resources and learning activities for developing programs to eliminate sexism.

Priority was given to programs which were designed to reduce sex stereotyping in vocational education and also focused on opportunities in rural areas and for individuals migrating from rural to urban centers with a high concentration of economically disadvantaged, unskilled, and unemployed persons.

Budget Data

Purpose	FY '78 Allocated	FY '78 Expended
Sex Bias Support Personnel	$ 50,000	$ 38,633
Support Services for Women	300,000	9,947
Day Care Services	500,000	-0-
Displaced Homemakers	200,000	5,739
Exemplary and Innovative Programs	628,059	169,133

TEXAS ENROLLMENT GOALS AND RESULTS FOR WOMEN AND MEN - 1979

	Secondary		Post-Secondary		Adult	
	Goals	Results	Goals	Results	Goals	Results
Women						
Distributive	- - -	- - -	28.6%	39.9%	- - -	- - -
Agricultural	11.6%	12.3%	27.8	28.2	26.4%	12.1%
Trade & Industrial excluding Cosmetology	7.2	9.2	7.2	11.1	- - -	- - -
Technical	- - -	- - -	13.2	14.1	16.8	9.8
Industrial Arts	12.8	15.0	- - -	- - -	- - -	- - -
Men						
Health	9.6	17.2	28.8	15.4	13.2	3[illegible].1
Office excluding Data Processing	23.0	23.5	18.0	18.9	4.8	35.4

TEXAS ENROLLMENT GOALS FOR WOMEN AND MEN - 1980

	Secondary	Post-Secondary	Adult
	Goals	Goals	Goals
Women			
Distributive	- - -	40.3%	- - -
Agricultural	13.0%	29.1	- - -
Trade & Industrial excluding Cosmetology	11.1	12.0	13.4%
Technical	- - -	15.2	10.1
Industrial Arts	16.2	- - -	- - -
Men			
Health	19.1	15.7	32.3
Office excluding Data Processing	13.1	30.3	27.3
Home Economics	23.7	19.3	35.9

Women enrolled in Non-traditional, Mixed and Traditional categories[*] by occupational training area and year, Texas

	1972	1976 (percent)	1978
Non-traditional: Total	1.4	6.4	11.1
Trades and Industry	2.4	5.8	6.6
Agriculture	0.7	4.5	13.8
Distributive Education	8.7	14.2	15.8
Health	0.0	0.0	0.0
Home Economics (Gainful)	0.0	0.0	0.0
Business	0.0	0.0	0.0
Technical	4.1	15.7	18.2
Mixed: Total Gainful & Non-gainful	55.4	52.4	59.1
Gainful Only	46.6	49.2	55.7
Trades and Industry	34.7	34.1	49.1
Agriculture	10.6	30.4	57.0
Distributive Education	44.6	44.7	50.7
Health	71.6	64.9	67.2
Home Economics (Gainful)	0.0	0.0	0.0
Business	53.0	59.1	60.7
Technical	27.7	20.5	0.0
Home Economics (Non-gainful)	71.8	77.9	67.0
Traditional: Total Gainful & Non-gainful	94.7	84.7	84.3
Gainful Only	90.9	88.3	88.0
Trades and Industry	95.7	85.7	87.6
Agriculture	0.0	0.0	0.0
Distributive Education	0.0	0.0	0.0
Health	89.2	90.7	90.5
Home Economics (Gainful)	88.4	82.5	78.0
Business	91.9	90.7	93.0
Technical	0.0	0.0	0.0
Home Economics (Non-gainful)	94.3	83.4	83.0

SOURCE: Based on data from U.S. Department of Health, Education, and Welfare, Bureau of Occupational and Adult Education.

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[*] Percentage of women enrolled in vocational education courses nationally, 1972. Non-traditional (NT) = 0.0 to 25%, Mixed (M) = 25.1% to 75.0%, Traditional (T) = 75.1% to 100%.

Analysis of Texas Detailed Enrollment Data, 1972 - 1978

Non-Traditional

Agricultural. Increase of percent women enrolled was greater than the national increase:

% Women	1972	1978
Texas	0.7%	13.8%
U.S.	3.9	13.1

Women made a major gain in Non-traditional Agriculture in Texas between 1976-1978, while nationally the shift had already leveled off. The enrollment of women increased from 1,024 in 1972 to 15,622 in 1978.

Detailed programs. Increase resulted primarily because of Agricultural Production, although every program, with the exception of Forestry, showed substantial increases in both percent and number of women enrolled.

Technical. The percent women in Non-traditional Technical courses increased at a more rapid rate than the national:

% Women	1972	1978
Texas	4.1%	18.2%
U.S.	8.6	16.7

The enrollment increased twice as much prior to 1976 as it did after 1976, from 334 in 1972 to 5,367 in 1976 to 8,934 in 1978.

Detailed programs. Most increases occurred in Miscellaneous Technical courses. Other smaller courses in which women made gains between 1972 and 1978 were Architectural, Industrial, and Mechanical Technologies; Fire Stafety; and Police Science.

Trade & Industrial. Increase of percent women enrolled in Non-traditional Trade and Industrial courses in Texas was comparable to national expansion, but Texas started well below U.S. and was still three percentage points below U.S. in 1978:

% Women	1972	1978
Texas	2.4%	6.6%
U.S.	5.4	9.5

Detailed programs. Major increases from 1972 to 1978 were in Other Construction, Drafting, Graphic Arts, Law Enforcement, Machine Shop, and Electronics.

Mixed and Traditional

Business. Enrollment of women in Mixed courses increased 10,000 by 1976 and another 7,000 by 1978. Percentage increase brought Texas up to the national average:

% Women	1972	1978
Texas	53.0%	60.7%
U.S.	56.8	60.5

Distributive Education. Large increase (20,000) in numbers enrolled.

Detailed programs. One-third of the women enrolled in Mixed Distributive Education in Texas were in Real Estate.

Health

Mixed. The rate of decline in the percent women in Mixed Health courses in Texas was comparable to the national decline, but a larger percentage of women remained enrolled in Health courses in 1978 than was true nationally:

% Women	1972	1978
Texas	71.6%	67.2%
U.S.	63.2	57.7

Traditional. 80% of the women enrolled in Traditional Health courses in Texas were in some sort of Nursing. There were higher percentages of women enrolled in Health than nationally.

Trade and Industrial. Rapid expansion in Mixed courses, mainly in Quantity Foods - 27.1% in 1972 to 61.9% in 1978.

Home Economics

Traditional. The reduction in percent women enrolled in Traditional Gainful Home Economics in Texas was greater than the national reduction:

% Women	1972	1978
Texas	88.4%	78.0%
U.S.	86.1	82.5

Total women enrolled in Traditional Gainful Home Economics in Texas continually increased from 8,100 in 1972 to 23,400 in 1978.

WYOMING

Summary Analysis

State Reports

Unlike many other small states that utilized only a portion of the $50,000 allocated for the Sex Equity Coordinator, Wyoming attempted to utilize $21,210 of the $50,000 for programs. The fact that BOAE disallowed some of that allocation should not obscure the state's effort to utilize the full $50,000.

There was nothing in the State Plan to explain why Wyoming made such progress in eliminating sex stereotyping as indicated by the enrollment data.

Enrollment Data

Extremely positive gains were made in Trade and Industrial Non traditional enrollment and in Agricultural. Given that a limited number of courses are offered in any state with a small population, Wyoming showed positive enrollment increases above the national averages in all courses offered.

There was an increase of women in Mixed Business courses; in all programs there were exceptional increases.

Men made gains in courses Traditional for women and women made gains in courses Traditional for men. Such uniform increases could not have occurred without effort.

Analysis of Wyoming State Reports

SACVE Recommendations

Devise means to achieve more equal sex representation in vocational education training programs.

Public Hearing Comments

There is a need for supportive services for women in vocational education, day care services for children of students in post-secondary and adult vocational programs, and grants to overcome sex bias and sex-role stereotyping in vocational education.

> State response. There are not enough funds to adequately provide day care services for children of students. Priority was placed on funding the improvement of secondary vocational programming.

BOAE Staff Report

Projects were funded from the $50,000 allocated for the support of personnel working full-time to carry out the required functions. The second and fourth projects (listed below), however, do not relate directly to the ten functions and as such cannot be funded from the $50,000 required funds.

MERC/Q Findings

MERC/Q was conducted for Wyoming, but no report was available.

Program Discriptions

Use of sex bias funds for purposes other than staff are as follows:

> A grant for $2,500 to develop an audio-visual recruitment package for the purpose of encouraging females to enroll in the construction technology program.
>
> $1,500 for guidance and instructional materials for home economics classes which develop career decision-making skills to address the issue of sex-role stereotyping.
>
> $500 to conduct an in-service workshop for district vocational teachers, counselors, and administrators.
>
> $180 to cover workshop expenses for a vocational education teacher to develop skills in helping women overcome math anxiety.

$16,530 to conduct a needs assessment of rural women 15 years and older in a six-county area.

Displaced homemakers. Program funded for exploration, placement, and follow-up.

Budget Data

Purpose	FY '78 Allocated	FY '78 Expended
Displaced Homemakers	$ 40,000	$ 10,000
Sex Bias Personnel	50,000	50,000

Women enrolled in Non-traditional, Mixed and Traditional categories* by occupational training area and year, Wyoming

	1972	1976 (percent)	1978
Non-traditional: Total	3.1	12.8	12.3
Trades and Industry	1.2	12.1	10.7
Agriculture	3.5	13.6	18.2
Distributive Education	16.0	33.3	47.0
Health	0.0	0.0	0.0
Home Economics (Gainful)	0.0	0.0	0.0
Business	0.0	0.0	0.0
Technical	8.6	10.5	7.2
Mixed: Total Gainful & Non-gainful	57.8	64.1	56.0
Gainful Only	57.8	61.4	53.7
Trades and Industry	0.0	26.8	63.7
Agriculture	0.0	0.0	0.0
Distributive Education	56.9	63.1	33.8
Health	0.0	0.0	89.0
Home Economics (Gainful)	0.0	0.0	0.0
Business	58.3	61.8	65.1
Technical	0.0	0.0	0.0
Home Economics (Non-gainful)	0.0	85.5	83.8
Traditional: Total Gainful & Non-gainful	93.5	75.3	74.8
Gainful Only	87.9	68.4	70.3
Trades and Industry	0.0	0.0	100.0
Agriculture	0.0	0.0	0.0
Distributive Education	0.0	0.0	0.0
Health	100.0	85.2	91.1
Home Economics (Gainful)	63.5	76.1	65.3
Business	88.0	67.0	70.0
Technical	0.0	0.0	0.0
Home Economics (Non-gainful)	97.4	83.5	80.0

SOURCE: Based on data from U.S. Department of Health, Education, and Welfare, Bureau of Occupational and Adult Education.

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* Percentage of women enrolled in vocational education courses nationally, 1972. Non-traditional (NT) = 0.0 to 25%, Mixed (M) = 25.1% to 75.0%, Traditional (T) = 75.1% to 100%.

Analysis of Wyoming Detailed Enrollment Data, 1972-1978

Non-Traditional

Agricultural. Percent women enrolled in Agriculture increased at a greater rate than the national:

% Women	1972	1978
Wyoming	3.5%	18.2%
U.S.	3.9	13.1

Total student enrollment expanded from 1,900 (1972) to 2,500 (1978). At the same time the number of women increased from 68 to 450.

Detailed programs. Greatest increases were in Agriculture Supplies/Services, Agricultural Mechanics, Agricultural Products, and Miscellaneous Agriculture.

Technical. Percent women enrolled increased between 1972 (8.6%) and 1976 (10.5%), but by 1978 most of the Wyoming Technical program had been phased out.

Trade and Industrial. Percent women enrolled in Non-traditional Trade and Industrial in Wyoming in 1972 (1.2%) was much lower than the national, but by 1978 (10.7%) was greater than the national.

Total number of women enrolled rose from 16 (1972) to 1,184 (1978).

Detailed programs. In 1972 women were in two courses: Graphic Arts and Drafting. In 1978, they were in twelve courses; most were in Woodworking, Drafting, and Graphic Arts.

Mixed

Total women enrolled in Mixed courses in Wyoming increased from 1,700 (1972) to 2,100 (1976) and to 3,800 (1978). The major shift in women's enrollment occurred after 1976. This pattern was exactly replicated in Mixed Business and Distributive Education.

Business. Nine out of ten women enrolled in Mixed Business were in Accounting and Computing, in which women's total enrollment doubled between 1972 and 1976, and then again between 1976 and 1978.

Distributive Education. In 1978, percent women in Mixed Distributive Education in Wyoming (33.8%) was substantially lower than the national percent women (52.2%).

Health and Trade & Industrial. Percent women in Wyoming in Mixed Health (89.0%) in 1978 was much higher than the national percent women (57.7%). The same was true of Trade and Industrial (63.7%) which was substantially higher than national percent women (46.7%) in 1978.

There seems to have been no vocational education program available in Mixed Health in Wyoming prior to 1978 and very little in Mixed Trade and Industrial which partially accounted for the high percent of women enrolled once these programs started.

Traditional

Nine out of ten women enrolled in Traditional courses in Wyoming in 1978 were in Traditional Business; enrollment in other courses was negligible.

Home Economics. In Wyoming, percent women enrolled in Traditional Home Economics courses decreased 17.5 percentage points between 1972 and 1978 from 97.4% to 80.0%. The percent women decreased in every course.

Matrix of Activities Addressed in State Plans [1]

	AL	CA	FL	GA	ID	IL	NH	NM	NY	OH	OK	OR	PA	TX	WY
1. STATE PLAN REVIEW AND PREPARATION															
Review state plan for sex equity	X		X	X	X	X	X	X	X	X	X	X	X		X
Develop comprehensive plan to overcome sex bias	X	X				X	X	X	X	X	X			X	
State general commitment to sex equity in state plan		X	X	X	X	X	X	X	X	X	X	X	X	X	X
Develop and implement state study to eliminate sex bias and sex stereotyping at all levels		X							X		X	X		X	
2. REVIEW STATE GRANTS FOR SEX EQUITY [2]															
Review distribution of grants to assure needs of women are addressed	X	X	X	X	X	X	X	X	X	X	X	X	X		X
Review programs funded by state office for sex bias	X	X	X	X	X	X	X	X	X	X	X	X	X		X
Require an evaluation component on each program include elimination of sex bias		X			X	X			X			X			
3. INVOLVE OTHER AGENCIES/INDIVIDUALS/STUDENTS															
Establish a State Advisory Council on Sex Equity	X				X	X			X	X	X	X			
Require Local Advisory Councils to include person aware of problems of sex discrimination and bias		X				X			X	X		X			
Involve student organizations in non-traditional vocational education		X	X									X		X	
Develop on-site visits to business and industry for non-traditional students														X	
Work cooperatively with other agencies and organizations to eliminate sex bias			X		X				X	X				X	

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[1] The 1980 Plans were analyzed for this matrix from 14 states and the 1979 Plan for Georgia.

[2] Description of programs funded by state for sex equity described separately in each Analysis of State Reports.

	AL	CA	FL	GA	ID	IL	NH	NM	NY	OH	OK	OR	PA	TX	WY
4. EVALUATE/MONITOR/PROVIDE TA TO LEAs															
Provide technical assistance to LEAs	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Evaluate performance of LEAs and funded programs		X						X	X	X		X			X
Utilize results of evaluations/and Action Plans in determining state priorities						X			X	X	X	X		X	
Stimulate locally initiated projects		X			X						X	X			
Review Title IX Evaluations		X	X				X	X	X	X	X	X	X	X	
Develop monitoring tools other than Title IX self evaluation	X	X		X	X	X				X	X	X		X	
Monitor complaints														X	
Make recommendations to LEAs on affirmative action		X							X	X					
5. DEVELOP AND REVIEW CURRICULUM															
Review books and materials in use for sex stereotyping	X	X				X	X		X	X	X	X		X	X
Identify and disseminate curriculum for overcoming sex bias and stereotyping		X	X			X	X	X	X	X	X	X	X	X	X
Train curriculum personnel in developing bias-free curriculum							X							X	
Provide guidelines for curriculum development and review		X					X		X		X			X	
Develop materials which eliminate sex stereotyping		X	X	X		X	X	X	X	X			X		
6. REQUIRE ASSURANCES FROM LEA, PRIOR TO FUNDING															
Require LEAs to provide assurances that programs will be conducted to reduce discrimination and sex stereotyping	X	X							X	X				X	
Require a plan to eliminate sex discrimination and sex stereotyping	X	X					X	X	X	X	X	X			

	AL	CA	FL	GA	ID	IL	NH	NM	NY	OH	OK	OR	PA	TX	WY
Require that LEAs actively recruit men and women for non-traditional programs		X					X	X	X	X					
Require submission of an accountability report on the progress of eliminating sex bias	X	X							X	X					
Establish goals and timetable for eliminating sex bias		X							X					X	
Require that all occupational institutions have an affirmative action plan		X							X	X					
Disseminate information on administrative jobs and women applicants in order to fulfill affirmative action plan									X						
7. ESTABLISH A SYSTEM OF INCENTIVES TO LEAs TO INCREASE PARTICIPATION IN NON-TRADITIONAL VOCATIONAL TRAINING PROGRAMS															
Fund conferences	X											X			
Provide T.A.	X														
Publicize LEAs with model programs	X														
Propose funding of LEA model programs		X	X	X	X	X	X	X	X	X	X	X			X
8. DISSEMINATE INFORMATION THROUGH WORKSHOPS, TRAINING, MATERIALS, MEDIA															
Conduct in-service and pre-service workshops for state staff, local voc. ed. teachers and administrators, counselors, civic and community groups	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Prepare and distribute informational publications and news releases, radio and TV releases	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Develop Teacher Training Institute(s) to provide awareness programs for vocational teachers, civic groups, state staff, etc.		X	X		X	X			X	X	X	X		X	
Develop resource packages to assist LEAs in implementing inservice training to eliminate sex stereotyping		X				X			X	X					

	AL	CA	FL	GA	ID	IL	NH	NM	NY	OH	OK	OR	PA	TX	WY
9. ADDRESS RECRUITMENT, ENROLLMENT, AND PLACEMENT PROGRAMS															
Develop recruiting material		X												X	
Undertake special recruitment efforts to attract men and women into non-traditional training									X	X			X	X	
Improve placement of men and women in non-traditional jobs									X	X	X				
Require that LEAs actively recruit men and women for non-traditional programs		X					X	X	X	X					
Encourage female enrollment in industrial arts								X							
10. ELIMINATE SEX ROLE STEREOTYPING IN CONSUMER AND HOMEMAKING EDUCATION															
Prepare students for dual role as homemaker and wage earner				X		X				X	X			X	
Develop curriculum for dual role and changing patterns						X					X				
Provide inservice training to consumer/homemaking teachers						X					X		X	X	
Increase enrollment of men in homemaking						X					X			X	
Increase offerings of homemaking to men and women at the secondary level											X				
Provide parenthood education to men and women						X					X			X	
Improve quality of family life courses		X									X	X		X	
Prepare men and women to work in the home						X									
11. PROVIDE SUPPORTIVE SERVICES TO STUDENTS															
Determine need for child care services		X							X		X				
Provide day care services to students										X	X	X			

	AL	CA	FL	GA	ID	IL	NH	NM	NY	OH	OK	OR	PA	TX	WY
Provide counseling, special services and job placement for teenage parents, women returning to the labor market, single heads of households, and homemakers who work part-time and desire full-time employment		X		X											
12. MISCELLANEOUS															
Prohibit discrimination in hiring and firing, and interview practices	X	X			X	X	X		X	X	X	X	X		X
Gather, analyze, and disseminate data on students and employees	X	X		X	X	X	X	X	X	X	X	X	X		X
Require knowledge of sex equity for state certification (pending)							X								
Emphasize non-sex role stereotyping in career education									X						X
Encourage women's involvement in apprenticeship		X												X	X

Appendix F

Common Elements of Successful Sex Equity Programs

Volume 3 of the Vocational Education Equity Study referenced in Section III. of this report describes case studies and promising approaches for achieving sex equity in vocational education. The following guidelines for replication describe the common elements of the successful programs analyzed for that study:

> "The case study programs have developed to meet needs in their own settings and they represent a variety of approaches for fostering greater sex equity. However, all of the programs have features in common and it is these features which appear to be important to successful replication. Briefly, the approaches which seem key to success are as follows:
>
> - Establish liaison with employers. The developers of virtually all the case study programs felt that this was of primary importance. Since employers hold the ultimate key to the success of any training, it is vitally important to gain their cooperation and support of the program. Several methods for doing this are described in the case studies.
>
> - Provide a thorough orientation to the program. It appears to be essential for program participants to have a clear idea of what the program itself entails and a realistic picture of the job market they will enter. Such orientation allows programs to work with participants who are motivated and serious about the training they are to receive. Because this is such an important consideration, the entire content of several programs was designed to provide an orientation to nontraditional career options.
>
> - Obtain full support from and integration with the host agency. This recommendation applies particularly to programs hosted in community colleges. Developers felt the programs must be perceived as completely integrated into the structure of the college rather than as an "add-on" feature. This gives the program more visibility and clout with the community at large and potential participants in particular.
>
> - Provide necessary support service to participants. Many programs felt that a key ingredient of their success came from offering supportive counseling services to clients. Individuals enrolled in nontraditional programs may need additional encouragement and support when striking out on an untraveled path. Re-entry women also often encounter family problems and other pressures associated with returning to school or the labor market. All programs emphasized the value of making use of existing services rather than duplicating efforts.

- Carefully plan and evaluate the program. A successful program must have a clear idea of what it hopes to achieve, and a way of measuring whether it is achieving it. Evaluation results provide the necessary feedback for making improvements. Following up participants once they have left the program was frequently mentioned as the most useful source of evaluation data.

- Hire competent, dedicated staff. This is obvious but vitally important. The particular qualities of staff which appear to be important for equity programs are:

  - A genuine commitment to sex equity

  - Knowledge of the labor force, particularly in the local area

  - An ability to serve as a role model for participants. Staff must understand that lack of experience or knowledge can be corrected through learning, and they must be willing to provide support to participants.

An essential feature of all programs which were identified was a realization that simply stating that all occupational training areas are open to both sexes is not enough. More exposure of programs and support of nontraditional enrollees are needed for things to be truly equal. Successful programs are designed to provide this exposure and support."[1]

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[1] American Institute for Research, The Vocational Education Equity Study, Volume 1: The Primary Data, Laurie R. Harrison, et. al. April, 1979, pp. 396-397.

Appendix G

WITNESS LIST

Following are the witnesses who formally participated in the Eastern and Western Hearings on Increasing Sex Equity in Vocational Education.

Eastern Hearing

State Profile

La Verna Fadale
Research Associate
Two Year College Development Center
State University of New York
Albany, New York

Carol Jabonaski
Equity Coordinator
State Department of Education
Albany, New York

George Quarles
Chief Administrator, Center for Career & Occupational Education
New York City Board of Education
Brooklyn, New York

Marilyn Richey
Coordinator, Project VOICE
Albany BOCES
Albany, New York

Donna Santa
Director, Occupational Education
Southern Westchester BOCES
Valhalla, New York

A Perspective from Persons Outside the Vocational Education System

Tracy Huling
Senior Research Associate
Advocates for Children of New York, Inc.
Long Island City, New York

Judith Layzer
Founder, Advisory Board Member,
Committee for Women in Non-traditional Jobs
Bureau of Labor Services
New York, New York

Jackie Potter
Director, Maine Commission on Women
State House
Augusta, Maine

Special Needs of Minority Women

Argelia Hermanet
Bi-lingual School Psychologist
Boston School Department
Springfield, Massachusetts

Marcella Maxwell
Dean, Continuing Adult Education
Medgar Evers College
Chairperson, New York City Commission on Women
New York, New York

Dottie Starks
Education Counselor
American Indian Community House
New York, New York

Kezirah Means-Vaughters
Vocational Education Liaison Coordinator
Division of Career Education
Office of Vocational Education
Philadelphia,Pennsylvania

Supportive Services / Innovative Programs

J. Michael Adams
Dept. of Industrial Arts and Technology
State University of New York at Oswego
Oswego, New York

Joyce Brabner
Director, Women's Correctional Institute / Arts Workshop
Wilmington, Delaware

Charlotte Farris
Director, Project MOVE
SUNY College of Technology
Department of Vocational-Technical Education
Utica, New York

Rita Hagin
Director, Project Freedom
North Randolphville Road
Piscataway, New Jersey

Nathan Mayron
Principal, Eli Whitney Vocational High School
Brooklyn, New York

Additional Witnesses

Charlotte Carney
Vocational Education Equity Specialist
Department of Education
Tallahassee, Florida

Elaine Hershey
Consultant, Office of the Director
Division of Vocational Education
Department of Education
Tallahassee, Florida

Jane Kelley
Women in Construction
New York, New York

Maureen Lynch
Sex Equity Coordinator
State Dept. of Education
Boston, Massachusetts

Western Hearing

State Profile Panel

Carol Andersen
Legislative Analyst
Education Commission of the States
Denver, Colorado

Eleanor Knapp
Former Vocational Director
Rocky Ford School District
Rocky Ford, Colorado

Lloyd Lawson
Assistant Director of Program Services
State Board for Community Colleges and Occupational Education
Denver, Colorado

Verlaine Zito
Dean, Benchwork and Processing Occupations
Utah Technical College
Salt Lake City, Utah

Perspective Outside Vocational Education

Charles R. Calica
Education Director for the Confederated Tribes
of Warm Springs
Warm Springs, Oregon

Jannelle Martín
Coordinator
Mi Casa Women's Resource Center
Denver, Colorado

Karen McDowell
Assistant Program Director
Women in Apprenticeship
Nevada State AFL-CIO
Carson City, Nevada

Ellen Wachs
Executive Director
Colorado Commission on Women
Denver, Colorado

Tasia Young
Executive Director
New Mexico Commission on the Status of Women
Albuquerque, New Mexico

Sex Equity Coordinator's Roles and Functions

Patricia Goggins
Supervisor, Sex Equity
Division of Occupational Education
State Board for Community Colleges
Denver, Colorado

Joy Joseph
Coordinator, Sex-Equity Program
Division of Vocational Programs
State Department of Education
Baton Rouge, Louisiana

Joan Siebert
State Department of Education
Equal Opportunity Specialist
Salem, Oregon

Marcile Wood
Education Consultant
Communications Network for Sex Equity in Vocational Education
Fort Collins, Colorado

Cecil Yvonne Wright
Coordinator for Equal Access to Vocational Education and Technology
Texas Education Agency
Austin, Texas

Post Secondary and Displaced Homemakers

Fran Chaffin
Assistant to the President
Lower Columbia College
Longview, Washington

Wanda Dingwall
Vocational Coordinator
Area Vocational Program
Denver, Colorado

Muriel Kirchmeier
Instructor for Changing Careers Class
Albuquerque Vocational Technical Institute
Albuquerque, New Mexico

Leslie Rasor
Coordinator of Industrial Orientation and
Associate Coordinator Womens Programs
Special Training Program
Lane Community College
Eugene, Oregon

Charlotte A. Stewart
Western Field Specialist for Displaced Homemaker Network
Phoenix, Arizona

Special Needs of Minority Women

Fannye Belle Evans
Coordinator of Office Occupations Department
Denver Public Schools
Emily Griffith Opportunity School
Denver, Colorado

Lea Goodwine
Instructor, Asian Project
Emily Griffith Opportunity School
Denver, Colorado

Jean Hunt
Coordinator of Special Projects
Coalition of Indian Control School Boards
Denver, Colorado

Mike Lopez
Director Regional Technical Assistance Staff, OCR
U.S. Department of Education
Denver, Colorado

Clarena Werk
Project Coordinator for Vocational Educational Projects
Fort Belknap Agency
Harlem, Montana

HEARINGS ON REAUTHORIZATION OF THE VOCATIONAL EDUCATION ACT OF 1963

Part 11: Sex Equity in Vocational Education

THURSDAY, DECEMBER 17, 1981

House of Representatives,
Subcommittee on Elementary, Secondary,
and Vocational Education,
Committee on Education and Labor,
Washington, D.C.

The subcommittee met, pursuant to call, at 9:35 a.m., in room 2175, Rayburn House Office Building, Hon. Arlen Erdahl, presiding.

Member present: Representative Erdahl.

Staff present: John F. Jennings, counsel, Nancy Kober, legislative specialist; and Richard DiEugenio, minority legislative associate.

Mr. **Erdahl**. The subcommittee will be in order.

The Subcommittee on Elementary, Secondary, and Vocational Education is continuing hearings today on the issue of sex equity in vocational education. This marks our 19th hearing this year on vocational education, and our last hearing of the session. Next year we will resume vocational education reauthorization hearings.

This morning we will hear from a panel of witnesses who have had experience in monitoring the impact of the 1976 amendments to the Vocational Education Act as they relate to sex equity. We are anxious to hear your recommendations for authorizing legislation.

I am not Chairman Perkins. I am Arlen Erdahl of Minnesota. As you are aware, my colleagues were in session until after 11 o'clock last night. We have adjourned in the House sine die, this being the last day of the session.

I am glad to be here today to take your testimony for my colleagues, for the record, and for our staff for consideration as we move into the next year of the 97th Congress. With that I will welcome the panel, if they could come to the witness table.

We are delighted to have you with us today. Perhaps you are aware of our procedure here. I think several of you have submitted written statements. They will be included in their entirety in the record. You may proceed in any way that is most comfortable with you. If you wish to read them, you can. If you wish, in the interest of time, to have a chance for exchange among yourselves, with me and other members, you can summarize them. Any way that is most comfortable with you.

With that we will start out with Ms. Ginny Looney, director of the Vocational Education Monitoring Project of Atlanta, Ga.

STATEMENT OF GINNY LOONEY, PROJECT DIRECTOR, VOCATIONAL EDUCATION MONITORING PROJECT, AMERICAN CIVIL LIBERTIES UNION OF GEORGIA, ATLANTA, GA.

Ms. LOONEY. My name is Ginny Looney, and I am testifying today on behalf of the Vocational Education Monitoring Project of the American Civil Liberties Union Foundation of Georgia. Since the passage of the 1976 Vocational Education amendments, the ACLU of Georgia has been trying to expand the opportunities for women and blacks in the job training programs taught in public schools in Georgia. We have monitored Federal, State and local implementation of the sex equity provisions of the Vocational Education Act in Georgia.

I. THE RECORD OF THE STATE OF GEORGIA

A. STATE EXPENDITURES

The results of our research were published in a report last year called "The Unfulfilled Promise of Vocational Education." What we concluded then remains true today: The Georgia Office of Vocational Education takes steps to eliminate sex bias in vocational education programs only when pressured or required to do so. The State spends little more than the minimum money required for sex equity programs, generally refuses to spend any discretionary funds to promote equity and vacillates between reluctance and resistance to other sex equity provisions of the law.

Since the Georgia State Plan for the Administration of Vocational Education was adopted in 1977, Georgia has never spent more than three-tenths of 1 percent of its appropriations for vocational education on sex equity programs. (See table 1.) The standard was set in fiscal year 1978 when scarcely more than a third of the sex equity coordinator's $50,000 was spent out of total State vocational education expenditures of $94 million. In the first 4 years of the plan, just three sex equity projects were funded that were not required by law. Not until this fiscal year have program improvement moneys become readily available for use on projects to eliminate sex bias.

B. COMPLIANCE WITH SEX EQUITY LAWS

Besides spending little money on programs affecting equity, the State of Georgia often has delayed complying with sex equity requirements until it was caught in violation of the law. For example, although the law requires each State to spend money for counseling and job training services for displaced homemakers, the pilot programs in Georgia were initiated only after Federal monitors scheduled a review of the State's implementation of the 1976 amendments.

In another instance, the State's belated compliance came after the ACLU of Georgia filed a Federal complaint with the U.S. Department of Education alleging that the State was violating the law. While the State was required to offer incentives to local schools to increase nontraditional enrollment and to develop model programs, all the State offered were publicity and plaques. When one chapter of the National Organization for Women reviewed its local vocational programs, the NOW members discovered that vocational educators did not know the State was offering such incentives. While State officials never acknowledged the validity of our allegation that no effective incentives existed, 3 months after our complaint was filed the State appropriated $100,000 for school systems to use on local sex equity projects.

Although progress toward equity in Georgia is taking longer than the ACLU would like, it has helped to have a person working full time on sex equity. The vocational equity coordinator has raised $220,000 from the Comprehensive Employment and Training Act for programs helping women seeking nontraditional jobs and displaced homemakers. She has developed resource materials, given technical assistance to local school systems and conducted workshops on the law and changing attitudes. She needs to continue in her job, however, to complete the changes which have begun.

C. CHANGES IN ENROLLMENT

Since it has only been in the last 2 years that all State staff in Georgia have been required to work on sex equity issues, the slow rate in eliminating sex-segregated classes in the State is not surprising. In the high schools there has been a gradual shift of girls from traditionally female programs, but the main change for boys has been along sex-stereotyped lines.

The postsecondary programs are even more rigidly sex segregated. One fourth of all postsecondary classes in 1979 enrolled just one sex. The gains over the past 5 years in nontraditional enrollments in the postsecondary schools are mixed. The percentage of women in technical programs is increasing but show little change in nontraditional enrollment in the trades. Men have increased their participation in nontraditional health courses, but their percentage of traditionally female business courses, like clerical and secretarial occupations, has decreased.

Within the general pattern of sex-segregated classes, there are also racial differences. For example, in 1979, there were as many black women at the postsecondary schools taking clerical courses as white women, but black women took secretarial courses at less than half the rate of white women.

However, enrollment figures alone do not indicate whether sex or race equity is being achieved, as we discovered this fall when we interviewed students in work study programs in five systems in the State. Looking at the enrollment figures, it appears that one of the work study programs, the diversified cooperative training program, has a good mix of students by race and sex, but a visit to the classroom showed differences in the jobs each sex and race had. For example, among the students we questioned, boys are working as cooks, stock clerks, service station attendants, mechanic's helpers, mill workers and veterinarian's assistants. The girls are working as cashiers, telephone salespersons, child care workers and babysitters. Whites work as sales clerks, while blacks work as housekeepers and janitors.

D. RECRUITMENT.

We also found that not enough affirmative recruiting of nontraditional students is taking place. Only 10 percent of the students we interviewed said they had ever heard a school lecture that encouraged them to enroll in nontraditional courses. While nearly a fifth—19 percent—were encouraged to take a nontraditional subject—half by school officials—most were urged to take courses, such as home economics, which helped their personal growth rather than trained them for jobs.

II. THE RECORD OF THE U.S. DEPARTMENT OF EDUCATION

Our monitoring of vocational education programs led us last year to file an administrative complaint with the U.S. Department of Education alleging that the State of Georgia was violating the Vocational Education Amendments of 1976. In July 1980, we asked the Assistant Secretary for Vocational and Adult Education to withhold approval of Georgia's 1981 annual plan until the State complied with the sex equity provisions of the law. We argued that Federal funds allocated to the State should be withheld until, first, meaningful incentives were adopted; second, programs were started for single heads of household, part-time worker/homemakers and men and women seeking nontraditional jobs; third, funding priority was given to sex equity in all exemplary and innovative programs; and fourth, local advisory councils had appropriate representation of women and minorities.

Within 3 weeks, then Assistant Secretary Daniel Taylor dismissed our complaint without requiring any State response, reviewing any documents on State programs or conducting any interviews. We wrote Taylor again, pointing out that he had ignored evidence in his office which clearly supported our allegations and also wrote higher level education officials asking them to intervene.

Taylor reversed his earlier decision that no legal basis existed for withholding approval of Georgia's plan and asked State education officials to provide information on the four issues we raised.

The State sent documents 2 inches thick to prove it was in compliance which, in our opinion, it did not prove. However, we were never given an opportunity to review the papers, much less analyze them before Georgia's plan was approved. Four days before the Carter administration left office, the U.S. Department of Education released the Federal funds to the State of Georgia.

The U.S. Office of Vocational and Adult Education's performance was not impressive, even in a department which publicly claimed equity as one of its concerns. While we did not expect the Department to indefinitely withhold Federal funds from the State, we did expect Federal officials to take a more aggressive role in investigating our complaint. At first, they did nothing; later they asked for the exact information we said should be provided and nothing more. As far as we can tell, they did not conduct a rigorous analysis of the information they received. In addition, they never clarified what standards they used to judge compliance with the law.

Based upon our experience, we think the bill that is written should contain, one, a private right of action; two, the requirement that a State have a sex equity coordinator with a fixed budget and the requirement that; three, a certain amount of program money be spent promoting sex equity.

III. CONCLUSIONS AND RECOMMENDATIONS

Our experience in trying to get the office for vocational and adult education to enforce the law convinces us that it is not concerned about sex equity. Given the reluctance of that office in handling administrative complaints, we think the Vocational Education Act should be amended to include a complaint process and a private right of action. Further, the poor enforcement of the law through the State planning process shows that the only way to make certain that the issue of sex equity is covered and that funds for women's programs are appropriated is by mandating that money be allocated for those purposes.

Although our review of the State of Georgia's sex equity efforts is basically negative, progress is being made. Perhaps the most encouraging sign is that nearly half of the high school work study students we interviewed this fall considered taking a nontraditional course. Additionally, the number of girls and women entering nontraditional courses has increased—but we still have a long way to go. We feel that additional progress will occur if the State spends more money on sex equity, willingly complies with the act's requirements and indicates clearly to the local systems that sex equity is a priority issue in the State department of education.

Further improvements will be made in eliminating sex bias and discrimination in vocational education programs, if a full-time sex equity coordinator with a fixed budget is maintained in the Vocational Education Act. Finally, we think each coordinator should be given a certain amount of funds to spend on program activities because discretionary moneys are seldom spent on sex equity projects. The ACLU of Georgia feels that vocational education retains its potential for decreasing the concentration of men and women working in sex-stereotyped jobs.

We urge this subcommittee to keep the elimination of sex bias and sex role stereotyping as a priority in federally funded vocational education programs.

[The prepared statement of Ginny Looney follows:]

PREPARED STATEMENT OF GINNY LOONEY, PROJECT DIRECTOR, VOCATIONAL EDUCATION MONITORING PROJECT, AMERICAN CIVIL LIBERTIES UNION FOUNDATION OF GEORGIA

My name is Ginny Looney, and I am testifying today on behalf of the Vocational Education Monitoring Project of the American Civil Liberties Union Foundation of Georgia. Since the passage of the 1976 Vocational Education Amendments, the ACLU of Georgia has been trying to expand the opportunities for women and blacks in the job training programs taught in public schools in Georgia. We have monitored federal, State and local implementation of the Vocational Education Act in the State, particularly the provisions calling for better state planning and for the elimination of sex bias and sex role sterotyping.

I. THE RECORD OF THE STATE OF GEORGIA

A. State expenditures

The results of our research were published in a report last year called "The Unfulfilled Promise of Vocational Education." What we concluded then remains true today: the Georgia Office of Vocational Education takes steps to eliminate sex bias in vocational education programs only when pressured or required to do so. The state spends little more than the minimum money required for sex equity programs, generally refuses to spend any funds on discretionary programs to promote equity and vacillates between reluctance and resistance to other sex equity provisions of the law.

Since the "Georgia State Plan for the Administration of Vocational Education" was adopted in 1977, Georgia has never spent more than three-tenths of one percent of its appropriations for vocational education on sex equity programs. (See Table 1.) The standard was set in fiscal year 1978 when scarcely more than a third of the sex equity coordinator's $50,000 was spent out of total state vocational education expenditures of $94 million. In the first four years of the plan, just three sex equity projects were funded that were not required by law. Not until this fiscal year have program improvement monies become readily available fo use on projects to eliminate sex bias.

TABLE 1.—AMOUNT AND PERCENT OF MONEY SPENT ON SEX EQUITY IN GEORGIA

Fiscal year	Spend on sex equity	Total State expenditures	Percent spent on sex equity
1978	$17,891	$94,000,000	0.02
1979	42,920	109,000,000	.05
1980	[1] 72,019	128,000,000	.1
1981	366,381	139,000,000	.3

[1] Figures from 1980–81 are funds budgeted; the exact expenditures are not known. 1982 data is not available.

Source: Georgia fiscal year 1978 and 1979 Accountability Reports for Vocational Education, Georgia's fiscal year 1980 and 1981 Annual Program Plans for Vocational Education.

No money has been spent, as allowed by law, for child care, support services for women seeking nontraditional jobs or programs to increase the number of women teaching in nontraditional fields. The failure of the state to start programs to train nontraditional teachers is in spite of the State's agreement with a recommendation in the 1979 Plan that women be trained for nontraditional teaching jobs. Two years after the State's commitment, the State vocational education director was asked when the training was to begin. He listed several obstacles, concluding, "These things take time." The training still has not been held.

B. Compliance with sex equity laws

Besides spending little money on programs affecting equity, the State of Georgia often has delayed complying with sex equity requirements until it was caught in violation of the law. For example, although the law requires each state to spend money for counseling and job training services for displaced homemakers, the pilot programs in Georgia were initiated only after federal monitors scheduled a review of the State's implementation of the 1976 Amendments. Similarly, Georgia first began claiming to help single heads of households, part-time homemakers and men and women seeking nontraditional jobs after public criticism that the State was not following the law which required those groups to be served.

In another instance, the State's belated compliance came after the ACLU of Georgia filed an administrative complaint with the U.S. Department of Education alleging that the state was violating the law. Georgia was required to offer incentives to local schools to increase the enrollment of men and women in nontraditional courses and to develop model programs to reduce sex stereotyping in job training and placement. Since the law's sex equity provisions mainly affected local school districts through indirect means, the ACLU of Georgia felt the incentives were crucial in making schools seriously consider the issue of sex bias. However, all the state offered to encourage local superintendents, principals, vocational supervisors and teachers to seek equity in the classroom were publicity and plaques. When members of the Savannah chapter of the National Organization for Women reviewed their local programs, they discovered that vocational educators did not know the state was offering such incentives. While state officials never acknowledged the validity of our allegation, three months after our complaint was filed the state had appropriated $100,000 for small grants to local school systems to be used for sex equity projects. Unfortunately, those incentive grants appear to be a one-time expenditure.

It is still unclear to us whether the mandate for local advisory councils to have an appropriate representation of women and minority members is being met in Georgia. In response to our federal complaint last year, the state submitted a paper which said that four local councils had no women as members and 21 had no minorities; thus, they were not complying with the law. Apparently the state is interpreting appropriate representation on local councils to mean at least one woman and one minority member; however, the regulations interpret appropriate representation to mean a group's percentage of the population or participation in the labor force. Using the far lower state standard, few councils would be found in violation of the law.

Although progress in Georgia is taking longer than the ACLU would like, it has helped to have a person working full-time on sex equity. The vocational equity coordinator has raised $220,000 from the Comprehensive Employment and Training Act for programs helping women seeking nontraditional jobs and displaced homemakers. She has developed resource materials, given technical assistance to local school systems and conducted workshops on the law and changing attitudes. A key factor in the state's accomplishments has been the development of local plans which set goals and timetables to eliminate sex bias. The sex equity plans are part of the local system's application to the state for funding and have led to the appointment of many local sex equity coordinators. More time is needed to complete the changes which have begun, as the following enrollment figures show.

C. Changes in enrollment

Georgia was one of the 15 states included in the study "Increasing Sex Equity" published last December by the National Advisory Council on Vocational Education and the National Advisory Council on Women's Educational Programs. That report concluded that "those schools putting the most effort into various activities to further equity were also those with the highest non-traditional enrollment of women. Furthermore, the more attention the state paid to what the school was doing, the more the school tended to do."

Since state staff in Georgia have been required to work on sex equity issues only for the past 2 years, the slow rate in eliminating sex-segregated classes in the state is not surprising. In the high schools there has been a gradual shift of girls from traditionally female programs, but the main change for boys has been along sex-stereotyped lines. The percentage of girls in agriculture has doubled, and they have increased their percentage of industrial arts from 5 percent in 1976 to 22 percent in 1980. (See table 2.) A large drop in the boys' participation in agriculture has been offset by their move into industrial arts. Thus in 1976, 28 percent of the boys in vocational education programs took agriculture and 13 percent took industrial arts; in 1980 11 percent took agriculture and 26 percent took industrial arts.

TABLE 2.—COMPARATIVE PERCENTAGES OF FEMALE ENROLLMENT IN SECONDARY PROGRAMS IN GEORGIA, 1976–80

Program	Female				
	1976	1977	1978	1979	1980
Agriculture	12	23	17	19	24
Distributive education	44	44	52	49	49
Health	87	73	71	84	81
Consumer and homemaking	84	83	83	75	73
Occupational home economics	84	(1)	(1)	82	(1)
Industrial arts	5	(1)	9	14	22
Business and office	75	75	85	66	65
Trade and industry	16	17	20	22	23
Total	57	64	56	51	51

[1] Data not available.

Source: Georgia State Department of Education, Georgia fiscal year 1980 and 1981 Annual Program Plans for Vocational Education; and Office of Vocational Education, Statewide Secondary Summary, fiscal year 1978–79.

There are, of course, limitations to looking at percentages of males and females in the major programs as a sign of changing enrollment patterns. For example, in trade and industry there are traditionally female courses such as cosmetology, mixed courses like graphic arts and traditionally male courses such as the construction cluster. The total percentage of girls in trade and industry is far greater than their percentage of most traditionally male courses, as table 3 shows. Most girls are likely to enroll in the trade courses which include tasks, such as cooking and drawing, that reflect traditional skills of women.

TABLE 3.—NUMBER AND PERCENTAGE OF GIRLS ENROLLED IN LARGEST SECONDARY TRADE AND INDUSTRY COURSES IN GEORGIA, 1980

Course of study	Total enrollment	Number girls	Percent girls
Other metalworking occupations	6,165	374	6.1
Other automotive/transportation cluster	9,637	701	7.3
Other construction cluster	7,638	680	8.9
Appliance repair/electromechanical cluster	3,972	372	9.4
Drafting occupation/cluster	7,234	1,582	21.9
Graphic arts occupations	3,134	1,393	44.4
Quantity food occupations	4,540	2,337	51.5
Cosmetology	3,475	3,367	96.9
Total all trade and industry classes	55,806	12,773	22.9

Source: Georgia's fiscal year 1982 Annual Program Plan for Vocational Education.

The ACLU of Georgia has found that post-secondary programs are even more rigidly sex-segregated, perhaps because those programs are involved in job training compared to the many career exploratory classes taught in the high schools. One-fourth of all post-secondary classes in 1979 enrolled just one sex, and most of the enrollment changes since 1972 have been along sex-segregated lines, especially for men.

The biggest change in post-secondary enrollment has been the rise in the number of women in vocational education from 40 percent in 1974 to 51 percent in 1980. When compared to their overall participation in vocational programs, the percentage of women has increased slightly in technical programs but has shown a negligible rise in nontraditional enrollment in the trades. Men have increased their participation in nontraditional health courses slightly, but their percentage of traditionally female business courses, like clerical and secretarial occupations, has decreased. The gains over the past five years in nontraditional enrollements at the post-secondary schools are mixed, as Table 4 shows.

TABLE 4.—PERCENT OF ENROLLMENT CHANGES IN THE MOST POPULAR POSTSECONDARY VOCATIONAL EDUCATION COURSES IN GEORGIA, 1977 and 1981

	Women, 1976-77	Women, 1980-81	Change of women
Traditionally female course of study:			
Practical nursing	98	96	−2
Clerical occupations	93	97	+4
Secretarial occupations	97	99	+2
Cosmetology	90	90	0
Traditionally male courses of study:			
Electronic technology	3	8	+5
Air-conditioning	(1)	1	0
Auto mechanics	1	3	+2
Welding	2	5	+3

[1] Data not available.

Source: Georgia State Department of Education, Office of Vocational Education, Postsecondary School Enrollments for Fiscal Year 1980-81; Georgia's Fiscal Year 1981 Annual Program Plan for Vocational Education.

Within the general pattern of sex-segregated classes, there are also racial differences. For example, in 1979, there were as many black women at the post-secondary schools taking clerical courses as white women, but black women took secretarial courses at less than half the rate of white women. Black women also were enrolled heavily in child care classes while white women took accounting in large numbers. Together black men and women, 28 percent of the student body, were more than two-thirds of the enrollment in barbering and quantity foods, two programs leading to relatively low-paying service jobs.

However, enrollment figures alone do not indicate whether sex or race equity is being achieved, as the ACLU of Georgia discovered this fall when we interviewed students, instructors and employers in the cooperative education programs in five systems in the state. The cooperative education programs are high school work study programs in which the student spends half the day in the classroom and half the day working on a job. We found that the diversified cooperative training program classes we visited, which have a 35 percent female enrollment, still have stereotyping by sex and race in the jobs held. For example, among the students we questioned, boys are working as cooks, stock clerks, service station attendants, mechanic's helpers, mill workers and veterinarian's assistants. The girls are working as cashiers, telephone salespersons, child care workers and babysitters. White boys and girls work as sales clerks, while black boys and girls work as housekeepers or janitors. Looking at the enrollment figures, it appears that the program has a good mix of students by race and sex but a visit to the classroom showed differences in the jobs each sex and race had.

D. Recruitment

Since finding students holding stereotyped jobs in a program which has a mixed enrollment by race and sex, we have come to agree with vocational educators who say that numbers alone do not tell the story about how well equity is being achieved. However, while the educators argue that vocational equity simply means making students know they have the choice to take any course, we think it means more. We have found little affirmative recruitment and think teachers should be actively recruiting students who have not traditionally taken their course, just as they seek students who normally take it. For example, in the 1979 local plans of post-secondary schools to eliminate sex bias and sex role stereotyping, most of the schools proposed purely passive activities. Their primary recruitment activities were informing students that classes were open to either sex, revising promotional materials to eliminate bias and using slides and photograhs showing men and women working in nontraditional jobs. Only seven schools planned to go beyond a statement or picture of equal access to encourage nontraditional enrollment. Two of those schools proposed to recruit women into nontraditional programs but neglected to mention encouraging men to enter traditionally female programs.

In our interviews this fall with 100 high school work study students, we found only 10 percent had ever heard a school lecture that encouraged them to enroll in nontraditional courses. Nearly a fifth (19 percent) were encouaged to take a nontraditional subject—half by school officials—but most of the students were urged to go into vocational courses which helped their personal growth rather than trained them for jobs. For example, the boys are more likely to be encouraged to go into typing and home economics. Forty-seven percent of the students have considered taking a nontraditional course but only 30 percent have actually enrolled in such a course. Eleven boys have taken home economics and five have taken typing; five girls have taken shop, one as a required course. Thus, none of the students have taken classes which would train them for jobs which their sex has not traditionally held.

E. Public hearings on the annual plan

Because the ACLU of Georgia has participated in public hearings during the development of the annual plans for vocational education for the past four years, I would like to mention how the state has responded to testimony on sex equity. The women's and civil rights groups most active in the public hearings have all concluded that our recommendations are ignored or quickly dismissed, leaving us frustrated and feeling that we have wasted our time. Even when the state agrees with a recommendation made, its implementation bears little similarity with what the speaker intended. For example, last year the Women's Bureau recommended that information on apprenticeships be disseminated to high school counselors. The state responded by saying that its staff was working to obtain information on registered apprenticeships in the state. However, when we tried to get a copy of the information collected, we were sent a document which said nothing about apprenticeships. Since the state dismisses most suggestions, we are skeptical about whether testimony on the annual plan ever influences state actions. Nevertheless, we persist in speaking at the public hearings because we do not want our absence to be interpreted as lack of public support for equity. Additionally, we feel the state plan offers an introduction for public groups who want to know more about how the state vocational education system operates.

II. THE RECORD OF THE U.S. DEPARTMENT OF EDUCATION

The only time the ACLU of Georgia received a clear response from the state to our recommendations was after we filed an administrative complaint with the U.S. Department of Education alleging that the State of Georgia was violating the Vocational Education Amendments of 1976. In July 1980 we asked the Assistant Secretary for Vocational and Adult Education to withhold approval of Georgia's 1981 Annual Plan until the state complied with the sex equity provisions of the law. We argued that the $19.5 million in federal funds allocated to the state should be withheld until (1) new and meaningful incentives were adopted; (2) programs were started for single heads of household, part-time worker/homemakers and men and women seeking nontraditional jobs; (3) funding priority was given to sex equity in all exemplary and innovative programs; and (4) results of activities on sex equity were listed in the state's plan.

In addition, we criticized the Department for its review of annual plans and urged it to establish adequate standards for determining compliance with sex equity and planning provisions of the 1976 Amendments. We complained that federal officials accepted insufficient evidence for determining compliance, set too low a standard for compliance and failed to follow up on their findings of noncompliance.

A final criticism—that the Department refused to use the resources it had available to bring a state into compliance—proved prophetic in the following six months as we had to pressure the Department into taking our complaint seriously. Within three weeks, then Assistant Secretary Daniel Taylor dismissed the complaint without requiring any state response, reviewing any documents on state programs or conducting any interviews. Taylor said that his office "has continuously sought to promote education equity in vocational education" but "some of the ACLU recommendations go well beyond the authority of the current law." We wrote Taylor again, pointing out that he had ignored evidence in his office which clearly supported our complaint and also wrote higher level education officials asking them to intervene.

In a reversal of his earlier decision that no basis existed for "legally withholding . . . approval of this State's Plan," Taylor asked state education officials to provide information on the four issues we raised. The state had to assess the effectiveness of its incentives and adopt stronger ones when effectiveness was not apparent, analyze state activities for their impact on achieving sex equity in Georgia, provide more information on how displaced homemakers and other special groups were being served, and provide information on the composition of local advisory councils to see if they had appropiate representation of women and blacks. The state sent documents two inches thick to prove it was in compliance which, in our opinion, it did not prove. However, we were never given an opportunity to review the papers, much less analyze them before Georgia's plan was approved. Four days before the Carter administration left office, the U.S. Department of Education released the federal funds to the State of Georgia.

The U.S. Office of Vocational and Adult Education's performance was not impressive, even in an administration which publicly claimed equity as one of its major concerns. Before reading our complaint, one Department official told a reporter that he expected no major problems in getting Georgia's plan approved. While we did not expect the Department to indefinitely withhold federal funds from the state, we did expect federal officials to take a more aggressive role in investigating our complaint. At first, they did nothing; later they asked for the exact information we said should be provided and nothing more. As far as we can tell, they did not conduct a rigorous analysis of the information they received. In addition, they never clarified what standard was used to judge compliance with the law, such as how they defined giving priority to sex equity in exemplary programs. Taylor wrote in his first response, "It is essential that funds continue to flow to the states so that programs can operate at their current level. This is also in the interest of women and minorities served by vocational education." As one person told us in evaluating the Department's reaction to our complaint, "The message which has been . . . conveyed to the states is that compliance will not interfere with OVAE's primary concern which is to keep the funds flowing."

III. CONCLUSIONS AND RECOMMENDATIONS

Our experience in trying to get the Office for Vocational and Adult Education to enforce the law convinces us that it is not concerned about sex equity and that federal monitors spend more time advising the state on the minimum standards necessary to comply with sex equity laws than in enforcing those laws. Given the reluctance of the OVAE in handling administrative complaints, we think the Vocational Education Act should be amended to include a complaint process and a private right of action. Further, the poor enforcement of the law through the state planning process shows that the only way to make certain that the issue of sex equity is covered and that funds for women's programs are appropriated is by mandating that money be allocated for those purposes.

Although our review of the State of Georgia's sex equity efforts is basically negative, progress is being made. Perhaps the most encouraging sign is that nearly half of the high school work study students we interviewed considered taking a nontraditional course. Additionally, the number of girls and women entering nontraditional courses has increased—but we still have a long way to go. We feel that additional progress will occur if the state spends more money on sex equity, willingly complies with the Act's requirements and indicates clearly to the local systems that sex equity is a priority issue in the State Department of Education. Further improvements will be made in eliminating sex bias and discrimination in vocational education programs, if a full-time sex equity coordinator with a fixed budget is maintained in the Vocational Education Act. Finally, we think each coordinator should be given a certain amount of funds to spend on program activities because discretionary monies are seldom spent on sex equity projects. The ACLU of Georgia feels that vocational education retains its potential for decreasing the concentration of men and women working in sex-stereotyped jobs. We urge this Subcommittee to keep the elimination of sex bias and sex role stereotyping as a priority in federally funded vocational education programs.

Mr. ERDAHL. We will proceed with all of the panel today. Since we haven't very many members here, you have asked some questions of one another, or elaborate on or given emphasis to others what others have said.

The next participant is Ms. Anne Schink, representing the League of Women Voters.

STATEMENT OF ANNE SCHINK, MEMBER, STATE BOARD, LEAGUE OF WOMEN VOTERS OF PENNSYLVANIA, REPRESENTING LEAGUE OF WOMEN VOTERS

Ms. SCHINK. We really appreciate your holding this hearing after your late night session, partly because we believe the issue is of great interest and we hope that your committee will take these comments.

Thank you for this opportunity to express the views of the League of Women Voters of the United States on the issue of sex equity in vocational education. My name is Anne Schink. I am program vice president and director of women's issues of the League of Women Voters of Pennsylvania.

The League of Women Voters of the United States is a volunteer citizen education and political action organization comprised of 1,350 leagues in 50 States, the District of Columbia, Puerto Rico and the Virgin Islands. The League of Women Voters of the United States has had a long-standing commitment to Federal programs and policies promoting equal access to education and employment. On behalf of the League of Women Voters of the United States, I am here today to speak in support of a continued and strengthened Federal role in promoting equal opportunities for women and girls in vocational education.

The League of Women Voters Education Fund [LWVEF], a 501(C)(3) organization involved in research and citizen education, is currently involved in a project to monitor State and local compliance with the sex equity provisions of the 1976 vocational education amendments. Project coordinators in five States—Pennsylvania, Massachusetts, Iowa, Wisconsin and Idaho—have collected and analyzed State plans and accountability reports, enrollment data and State and local expenditures for sex equity. Through interviews with State and local administrators, teachers, counselors, and students, they have assessed the impact of the 1976 vocational education amendments [VEA's] and the commitment to sex equity among administrators and faculty.

Today I will comment on the major findings of the LWVEF study and propose recommendations for reauthorization. A more detailed summary of the study's findings and an analysis of the labor force participation of women has been submitted.

The first, and most important finding, is that the 1976 VEA's provided a major impetus toward addressing the problems of sex discrimination and stereotyping facing women in the vocational education system. Since its passage there has been slow, but steadily increasing support for sex equity, primarily at the State level. This has been reflected in the expansion of the sex equity staff, in budget increases and in a trend toward more stringent requirements governing local school districts' applications to the State for VEA funds.

In Iowa, for example, no Federal money had been budgeted for sex equity purposes priors to fiscal year 1977. In fiscal year 1978, 1979, and 1980, however, there was funding for a sex equity coordinator as well as for other related sex equity activities in Wisconsin, since passage of the 1976 amendments funding for sex equity purposes increased from $393,138 in 1977-78 to $556,724 in 1979-80.

In 1979 Wisconsin instituted a vocational equity incentive system offering financial incentives at both the secondary and postsecondary levels for a variety of programs and services related to sex equity. In Pennsylvania, the mandated $50,000 set aside for sex equity personnel led to the establishment of a sex equity office in the Bureau of Vocational Education. And in Massachusetts, in addition to funding for a sex equity coordinator, the Department of Education funded a project producing a series of booklets dealing with the concept of support groups for students in nontraditional programs.

As one administrator from Iowa commented, "Without the Federal initiative, sex equity would probably take a back seat to other vocational education issues." Administrators interviewed in each of the States have acknowledged the fact that the sex equity coordinator's efforts have been responsible for generating administratives support for sex equity.

Second, while it is evident that some commitment has been made in each of these States, much still remains to be done. In three of the States in the League of Women Voters Education Fund study, money allocated for the sex equity personnel was not fully expended. Expenditures for supportive services for women which are permissive but not mandatory in the legislation were virtually nonexistent. This was the case in Pennsylvania.

Without auxiliary services such as job counseling, job development and job placement, and child care, particularly for disadvantaged women, it is impossible to encourage and maintain female enrollment in nontraditional programs. In Wisconsin, no VEA funds are being used to train women for administrative positions. Yet on the State board of vocational, technical and adult education there is only one bureau director—of six—who is female and no postsecondary district directors—of 16—who are female.

Third, program enrollment continues to remain heavily segregated by sex. The major inroads into nontraditional programs have been in those areas which are not heavily sex role stereotyped, such as graphic arts, data processing and printing. In Pennsylvania, there were few, if any, nontraditional students in the area vocational technical schools [AVTS] monitored. These schools generally offer courses in trade and industry and technology, while the home high school offers courses in home economics and business. The female students interviewed stated they are offered little encouragement to enroll in the non-traditional programs in the AVTS. Enrollment data from the other project States also indicates that only slight gains have been made in traditionally male program areas.

Fourth, community involvement in sex equity issues can have a positive impact at the State and local level. In Iowa, as a result of League of Women Voters education fund involvement, members of the department of public instruction have become more responsive to the need to improve the status of women in vocational education.

In Wisconsin, during an interview with project coordinators, the State board president of vocational, technical and adult education recognized the need for the State board to become more informed about the issue of sex equity and requested that the sex equity coordinator provide a briefing for that purpose. And in Pennsylvania, League of Women Voters education fund monitoring in one of the local school districts led to the appointment of a title IX coordinator.

Finally, there is a general lack of commitment on the part of local administrators to achieving sex equity. The best way to describe implementation of the sex equity provisions at the local level is passive compliance. Little or nothing is done to actively encourage, recruit or support nontraditional students.

While progress has been slow, the League of Women Voters believes that the 1976 vocational education amendments were an important step in overcoming sex discrimination and sex stereotyping, and in promoting equal access to vocational education programs. I am here today to advocate a continued Federal role in the promotion of sex equity. As one vocational school principal in Springfield, Mass., commented recently:

> All these initial energies (resulting from the 1976 legislation) have been spent cracking the wall. The same amount of energy applied now will produce even greater results. If we stop now the effect will be to seal up that initial crack and thus waste all that initial effort.

The League of Women Voters believes that the crack in the wall can widen even further, if provisions in the current legislation are strengthened and funds are targeted for special purposes. I reiterate our continued support for the following provisions and urge that they be maintained and strengthened in any bill adopted by this subcommittee:

DECLARATION OF PURPOSE

A national objective set out in the declaration of purpose should be expanded to include the development and implementation of programs to overcome discrimination and stereotyping on the basis of race, national origin, sex, age, income and handicap in all vocational programs in the State, and thereby furnish equal opportunities in vocational education.

SEX EQUITY PERSONNEL

The mandated $50,000 set aside should be retained for personnel to work full-time providing technical assistance at the State and local level for the purposes of fostering equal educational opportunities in all vocational programs, and for overcoming sex discrimination and sex stereotyping in all vocational programs.

DISPLACED HOMEMAKERS AND OTHER SPECIAL POPULATIONS

A set-aside should be retained to provide programs and services to assess and meet the needs of special populations including displaced homemakers, single heads of households, part-time workers who want full-time jobs, and individuals trained in traditional areas. Given the unique problems faced by teenage parents, we believe they should be served under this section of the act.

ADVISORY COUNCILS

State advisory counsel in voctional education should be retained. Representation of women and minorities on these councils should continue to be required.

CITIZEN PARTICIPATION

The citizen participation component of the 1976 legislation should be maintained and broadened at the State and local level.

VOCATIONAL EDUCATION DATA SYSTEM

The vocational education data system should be maintained and should continue to collect and report data on enrollments and outcomes in vocational education by race, national origin, handicap, and by sex within those groups.

Studies have shown that States provide little financial support for programs and services which were permissive in the 1976 legislation. With State and Federal cutbacks for education we can anticipate even fewer expenditures in these areas. We therefore would add provisions requiring States to target funds for the following purposes:

To provide supportive programs and services to encourage and maintain enrollment in vocational programs leading to gainful employment.

To develop and implement exemplary programs designed to attract women into nontraditional programs and higher paying jobs. Implementation of model programs in such areas as recruitment, pre- and in-service training in overcoming sex bias for vocational teachers, supervisors and guidance counselors, and programs for special populations are necessary in order to carry out the purpose and intent of the legislation.

To provide for staff development to increase both the number of women teaching nontraditional occupations and the number of women in administrative positions.

To provide financial incentives to local school districts and vocational schools to develop and implement exemplary programs to overcome sex bias and discrimination, and to recruit females into nontraditional programs.

The League of Women Voters urges that the above recommendations be incorporated by the subcommittee in any bill adopted. We believe they are necessary to insure equal opportunity for women and girls, particularly the disadvantaged, in quality vocational education programs.

[The prepared statement and addendum of Anne Schink follow:]

Prepared Statement of Anne Schink, Program Vice-President and Director of Women's Issues, League of Women Voters of Pennsylvania

Thank you for this opportunity to express the views of the League of Women Voters of the United States (LWVUS) on the issue of sex equity in vocational education. My name is Anne Schink. I am Program Vice-President and Director of Women's Issues of the League of Women Voters of Pennsylvania. On behalf of the LWVUS, I am here today to speak in support of a continued and strenthened federal role in promoting equal opportunities for women and girls in vocational education.

The LWVUS is a volunteer citizen education and political action organization comprised of 1,350 Leagues in 50 states, the District of Columbia, Puerto Rico and the Virgin Islands. The LWVUS has had a long-standing commitment to federal programs and policies promoting equal access to education and employment. As such, we played an active role in promoting passage of the 1976 Vocational Education Amendments (VEAs) and implementing regulations, with emphasis on the particularly urgent needs of women and minorities. We also urged the Department of Education's Office of Civil Rights to promulgate guidelines that would actively promote compliance with federal civil rights statutes at the state and local level.

The League of Women Voters Education Fund (LWVEF), a 501 (c)(3) organization involved in research and citizen education, has undertaken a study of state and local compliance through a grant funded by the Edna McConnell Clark Foundation of New York City. In Pennsylvania, Massachusetts, Iowa, Wisconsin and Idaho Leagues are monitoring sex equity compliance in vocational education. This effort is dedicated to increasing citizen knowledge of the issues concerning access of women and girls to quality training programs. Such access can lead to placement in nontraditional occupations with high salaries and opportunities for advancement [illegible] will be describing some of the LWVEF study's findings in a moment.

I am pleased that this subcommittee is holding oversight hearings on sex equity in vocational education. Similar hearings were held prior to passage of the 1976 VEAs, at which time the persistence of economic and occupational discrimination faced by women in the labor force was documented. As a result of the information provided at the hearings, members of Congress agreed that career counseling and vocational training in areas not traditionally female could facilitate changes in women's status in the labor market. For the first time they included as a purpose of federal funding for vocational education the elimination of sex discrimination and sex-role stereotyping. We are here to urge you to maintain this as a major purpose, as the need for change is even more pronounced today. Women are entering the labor force in increasing numbers; in 1950 28.8 percent of all women were employed; by 1980 their numbers grew to 41.8 percent. At the same time, according to a report to the Ford Foundation prepared by Natalie Jaffe in April, 1980, women's average earnings as a percentage of men's declined. In 1955, full-time female workers earned 64 cents for every dollar earned by men. Today, women's earnings have dropped to 59 percent of men's. In 1978 the median wage for white females working full-time year round was $9 578; for minority women it was even lower—$8,996. By comparison, white males earned $16,194, and minority males earned $14,885. The disparity in earnings by sex is greater than the disparity by race, with minority females earning the least of all workers.

What makes these trends even more alarming is the fact that women have become increasingly more responsible for their own financial support, and for the full or partial support of their families. The rising divorce rate, coupled with a growing incidence of teen-aged, out-of-wedlock pregnancies with girls increasingly opting to keep their babies, has led to a substantial increase in the number of female-headed families in the last decade. Bureau of Labor Statistics data show that in March 1979, 8.5 million families—one out of every seven—were headed by women, of whom more than half (59.5 percent) were employed. In the words of the authors of the September, 1981 report of the National Advisory Council on Economic Opportunity, (NACEO) "Poverty among women is becoming one of the most compelling social facts of this decade."

Data gathered by the NACEO show that one female-headed family in three is poor. Women's earnings are so low that even full-time work is no security against poverty: more than a third of single mothers with children under six who worked full-time at paid labor were poor at some point in 1977. And the income gap between the sexes is by far widest among our youth: in 1977, the official poverty rate among female family heads under 24 years of age was almost 66 percent percent. According to the NACEO, "It is among the rising generation of young women then, that the poverty of the 1970s has been most devastating, and the outlook for the 1980s is most bleak." The Council has predicted that "if the proportion of the poor who are in female-headed families were to increase at the same rate as it did from 1967-1977, the poverty population would be composed solely of women and their children by the year 2000."

Education and employment have been the traditional routes out of poverty. For women this has not been the case. Women are concentrated in low-paying, non-unionized occupational groups with little job security and little opportunity for advancement. More than half are employed as clerical or service workers, and most female professional and technical workers are concentrated in teaching, nursing and health care. More than half of the female operatives are assemblers, checkers, examiners, packers, wrappers and textile operatives. Nearly half of the female craft workers are bakers, tailors, upholsterers, decorators and window dressers—all traditionally female jobs, all among the lowest paying of the crafts.

Occupational segregation mirrors the segregation in vocational training programs at the secondary and post-secondary levels. Vocational programs have in the past prepared only men for work in the skilled trades and high technology industries. However, if women are recruited and trained in such programs they can earn significantly higher salaries and achieve a greater degree of upward mobility than women who are trained in the traditional female occupations. For example, 1980 U.S. Bureau of Labor statistics show that as a plumber or pipefitter a woman can earn $347.20 weekly; as a carpenter $485; as a welder $420; and as a computer specialist $413.32. By contrast, a woman trained as a nurse's aide earns $155 per week; as a sales clerk $140; and as a typist $189.

The need to bridge the earnings cap becomes even more critical with changes in federal social policy. The federal budgetary cutbacks in welfare payments and in-kind benefits, such as medical and housing subsidies and foodstamps, will make it increasingly difficult for women to escape poverty. This is exacerbated by the cutbacks in job-training programs and support services associated with them. These changes place greater stress on the vocational education system to provide job training for women in program areas where they can acquire the skills requisite for work in economically viable occupations.

The vocational education system has the potential to prepare women for jobs in the skilled trades and high technology industries. However, without federal legislation mandating equal access to quality vocational programs, and without programs and services that ensure successful completion in these areas, this potential will not be translated into reality. The 1976 VEAs were an important step in this direction, but the task is still enormous. According to a 1981 National Institute of Education funded study conducted by the Project on National Vocational Education Resources (University of California, Berkley), sex discrimination—not race, economic disadvantage or handicap, is the major barrier to entrance into programs leading to well-paying jobs.

A national strategy, whose goal is to achieve economic revitalization and increased productivity must focus on job training in economically depressed areas—both urban and rural—and include outreach to women, who constitute an ever increasing portion of the disadvantaged population.

Now, I will discuss the findings of the LWVEF study monitoring state and local compliance with the sex equity provisions of the 1976 VEAs. State and local Leagues in Pennsylvania, Massachusetts, Iowa, Wisconsin and Idaho collected and analyzed state plans and accountability reports, enrollment data and information on state and local expenditures for sex equity. Through interviews with state and local administrators, teachers, counselors and students, League monitors have assessed the impact of the 1976 VEAs and the commitment to sex equity among administrators and faculty.

Findings from the LWVEF study indicate that the 1976 VEAs have provided the impetus for improving the status of women in vocational education programs. Prior to its passage the LWVEF found little or no commitment to sex equity. In Iowa, for example, no federal money had been budgeted for sex equity purposes prior to fiscal year 1977. In fiscal year 1978, 1979 and 1980, however, there was funding for a sex equity coordinator as well as for other sex equity related activities. For the first time, in fiscal year 1981, seven $700 minigrants and one $1,500 model grant were awarded to Local Education Agencies (LEAs) for projects designed to help eliminate sex bias and sex stereotyping. In fiscal year 1980, two displaced homemakers programs were funded for $22,670 and $25,000 respectively. As a member of the State Plan Planning and Accountability Reports Committee, in the Department of Public Instruction commented, "Without the federal initiative, sex equity would probably take a back seat to other vocational education issues."

In Pennsylvania, according to an interview with Dr. Lowery McHenry, Chief, Division of Vocational Education Planning and Financial Management, it was the mandated $50,000 set-aside for sex equity personnel that led to the establishment of a sex equity office in the Bureau of Vocational Education. The amount of federal dollars budgeted for sex equity personnel has increased, following an expansion of the sex equity staff in 1980: two assistants for equity and one for compliance were added.

In Wisconsin, there were almost no activities at any level which were concerned with sex equity or with attempts at making nontraditional options available to women and men prior to the 1976 VEAs. Since 1977-1978, however, total funding—federal, state and local—has increased from $393,138 to $556,724 in 1979-1980. And in 1979, Wisconsin institued a Vocational Equity Incentive System which offers financial incentives at both secondary and post-secondary levels for a variety of programs and services related to sex equity. It appears to be responsible for the increase in the Grants to overcome Sex Bias at the secondary level, which went from $1,228 in 1977, to $95,778 in 1979-1980.

The same holds true for Massachusetts. Prior to the 1976 VEAs no specific vocational education personnel were responsible for sex equity. In fiscal year 1978 and in fiscal year 1979, however, the mandated $50,000 was spent for the coordinator. Administrators interviewed in each of the five states have acknowledged the fact that the sex equity coordinator's efforts have been responsible for generating administrative support for sex equity.

While it evident that some commitment has been made in each of these states to improve the status of women in vocational education, much still remains to be done. In three of the states in our study, money allocated for the sex equity personnel was not fully expended. In Iowa, in 1980, only half the $71,735 budgeted was spent; the coordinator's position and the secretarial position were not filled for half of the year. No state monies have been designated thus far for the sex equity position. In Pennsylvania, while expenditures increased from $10,142 to $26,197 between 1977-1978 and 1978-1979 it was still far short of the mandated $50,000. No funds have been expended for support services for women. While Massachusetts had spent the mandated $50,000 on the sex equity coordinator, it did not spend significant sums for other sex equity activities. For example, in 1978, $47,282 federal dollars were allocated for Grants to Overcome Sex Bias but only but only $11,660 was spent. In 1979, $200,000 was allocated but only $34,474 federal dollars and $69,055 state dollars were spent.

In Wisconsin, activities to promote sex equity constitute a relatively small proportion of total VEA expenditures. At the secondary level only 1.6 percent of VEA funds were spent on sex equity activities and only 2.8 percent were spent at the post-secondary level in 1979-1980. Funds for Day Care, a permissive provision in the legislation, dropped from $88,792 in federal monies in 1978-1979 to nothing in 1979-1980, and from $162,042 at the state and local level in 1977-1978 to $37,971 in 1980. No VEA funds are being used under Section 104.603 (Support Services for Women) "to increase the number of women instructor involved in the training of individuals in programs which have traditionally enrolled mostly males, so as to provide support examples for women within the vocational education system—both at the secondary and post-secondary level." On the State Board of Vocational, Technical and Adult Education there is one bureau director (of six) who is female. All 16 post-secondary district directors are white males; there are two women just below the district director—one is head of Student Services and one of Community Services.

Findings of the LWVEF study parallel those of the Congressionally mandated National Institute of Education (NIE) study on vocational education. While all states have appointed sex equity coordinators, the mandatory expenditures are not always met. The NIE study reported that few states spent a significant proportion of their Federal or state and local funds on sex equity-related activities. While 42 states spend Federal VEA funds to support programs for displaced homemakers, the level of expenditure represents only .5 percent of Federal funds and less than .1 percent of state and local matching monies. Nearly 60 percent of the reported VEA outlays for such programs came from only five states—California, New York, Missouri, Washington, and Massachusetts. The rate of expenditures is extremely low for sex equity-related provisions which are permissive. A few examples: two-thirds of the money spent for support services for women were spent by California, Oregon and Washington, while Texas and Wisconsin accounted for more than half of the expenditures on day care. Expenditures under Subpart Three—Program Improvement and Supportive Services—for grants to support activities to overcome sex bias, accounted for less than 2 percent of VEA funds, and .1 percent of matching state and local funds. Six states—California, Maryland, Minnesota, Missouri, New York and New Jersey, were responsible for 80 percent of the total expenditures for this purpose.

The LWVEF findings thus far have focused on the impact of the VEAs at the state level. Now, I would like to turn to their findings resulting from monitoring compliance in several local school districts in each state. As each of the local studies focused on a unique school situation, it would be misleading to apply generalizations for all LEAs. However, some common themes emerged:

First, enrollment in program areas continues to remain segregated by sex. Females are concentrated in Health, Consumer and Homemaking, Occupational Home Economics and Office Occupations, while males predominate in Agriculture, Industrial Arts, Technical, and Trade and Industry. Where gains were made in nontraditional enrollments, they were in courses such as graphic arts, applied dssign and electronic accounting, which had less tendency to be regarded as "unfeminine."

Second, local administrators lacked an active commitment to sex equity and to encouraging and maintaining enrollment in nontraditional programs. Their strategy for encouraging nontraditional enrollments can at best be termed "passive" recruitment.

Third, budgetary cutbacks at the state and federal level will result in fewer programs and services promoting equal opportunities for women and girls in vocational education.

Finally, where concerted efforts were made towards achieving sex equity, enrollments in nontraditional programs either increased or were maintained. This paralleled the findings of the 1978 study by the American Institute for Research and the 1980 study undertaken for the National Advisory Council on Vocational Education (NACVE), and the National Advisory Council on Women's Educational Programs (NACWEP), which revealed that the largest gains in nontraditional enrollments were in those states where the VEAs were most effectively implemented, i.e., where there was a definite commitment on the part of the state administrators to sex equity activities.

The findings from the local school districts monitored substantiate the above observations. A summary of these findings follows:

PENNSYLVANIA

Three local school districts were monitored in Pennsylvania: Warren Area County School District; Easton Area School District, Northhampton County; Abington, Cheltenham School Districts, Montgomery County. The LWVEF study revealed:

Students are remaining in traditional vocations. There are few, if any, nontraditional students in the three Area Vocational Technical Schools (AVTS) monitored. The AVTS receive students from several local school districts. These schools generally offer courses in trade and industry and technology, while the home high school offers courses in home economics and business. There are significantly more males attending the AVTS. The female students interviewed stated they are offered little encouragement to enroll in the nontraditional programs in the AVTS. One further note on AVTS: of the 73 high school level AVTS, only one has a female director (Philadelphia), and one an acting female director. The remaining 71 have male directors.

The attitudes of most of the administrators interviewed concerning efforts to achieve sex equity was that regulations are unnecessary and a thorn in their side. Most resisted any suggestions to implement the law in their schools unless directed to do so by the central office of the school district. In one breath they complain about too much government; in the next breath they say they won't do anything unless it is mandated. At public hearings held on October 20 and 21 on the 1982-1987 Five-Year Plan, one AVTS director testified that "Substantial numbers of students were enrolled in nontraditional programs and we will not force anyone into such programs." He went on to say that no further emphasis was required for enrolling students in nontraditional areas. Yet a look at enrollment figures at the AVTS indicates otherwise. See Appendix A for enrollment in 1980 at Eastern Northhampton County Vocational Technical School. Similar distributions were reported in 1980 at Eastern Montgomery County AVTS. See Appendix B.

MASSACHUSETTS

Two local school districts were monitored in Massachusetts: the Saugus School District and the Springfield School District. Review of enrollment data and interviews in these districts led to the following observations:

Slight gains were made in nontraditional enrollments. However, these were in courses which are less likely to be heavily sex role stereotyped such as graphic arts, data processing and printing. For example, the print shop in a Springfield Vocational Technical School went from 95 percent male in 1970 to 50 percent in 1980. The greatest difficulty in increasing enrollment percentages remains in the trade areas—plumbing, electricity, mechanics, etc. Few girls apply, and those that do apply do not survive long. Instructors in these areas commented that girls drop out for such reasons as: only one toilet, lack of real commitment and flirting with the boys.

Students must select an academic or vocational program by the middle of the eighth grade. They receive little or no counseling prior to this decision. They are not alerted to job opportunities available through training in programs nontraditional to their sex.

There is pressure to continue to enroll females in programs leading to nongainful employment. One local administrator who chose to remain anonymous indicated that pressure from the school itself to balance enrollment, plus pressure from instructors in home economics to retain their jobs, has led to the preservation of these courses long after their usefulness has passed. He indicated that this practice is detrimental to the female population of the school who receive an expensive education and end up with little or no career training and a minimum wage.

Budget cutbacks present a major barrier to achieving sex equity in the vocational schools. The Assistant Commissioner of Education commented that "The passage of Proposition 2½ has drastically reduced the resources available to public education at the local level. As a result LEAs have already begun to eliminate a significant portion of their programs not directly related to traditionally understood educational goals. The problem will be compounded as the Commonwealth, which is already committed to a program of fiscal austerity, attempts to relieve the burden on local communities of Proposition 2½ by redirecting state funds from the state to the LEAs. The federal reduction of VEA funds will exacerbate efforts of the Commonwealth's Department of Education to promote equality through funded programs." The LWVEF's study revealed that Proposition 2½ has, in fact, reduced local commitment to sex equity. Most local sex equity coordinators wear many different hats and have many jobs—with sex equity one of the least important. While they are anxious not to violate the law, they have no time to add any initiative or extra effort to a low priority item. In Springfield the sex equity coordinator's position was dropped as a result of the budget cutbacks.

LWVEF monitors found that where there was a commitment made to increasing and maintaining enrollment of women in nontraditional programs, progress was made. One such example was found at Shawsheen Valley Regional Vocational Technical High School, in Billerica, Massachusetts. Students and counselors initiated and fostered a student support group for female and male students enrolled in nontraditional courses. From this effort Project SCOPE (Support of Coeducational Programs in Education) was initiated. Funded by the Massachusetts Department of Education, the project was developed by a student in the original support group who has graduated from a nontraditional program. She was hired as a consultant to the Sex Equity Coordinators in the Division of Occupational Education. The project produced a four booklet series dealing with the concept of support groups for students in nontraditional programs. The local Title IX coordinator has indicated that in the schools where the project has been in operation, students are remaining in nontraditional courses, and in some instances their numbers have increased.

WISCONSIN

Two local school districts were monitored in Wisconsin: Green Bay School District, and Wisconsin Rapids School District. A review of enrollment data revealed the following:

Little progress has been made in the enrollment of students in nontraditional courses. In Green Bay, 17 courses of the 55 offered at the secondary level were totally segregated (100 percent male or female, and 35 of the 55 were 80 percent or more of one sex. Where there were inroads into traditional male programs they occurred in graphic arts, forest management, horticulture, animal care and meat and dairy products. In Wisconsin Rapids, 5 out of 9 business courses were 80 percent or more female; 3 others were 75 percent or more female. Only personal typing was a mixed course. In Trades and industry, 13 or 18 courses were 80 percent or more male while all three Home Economics courses were 90 percent or more female. Agriculture is becoming a mixed program with four of seven courses more than 25 percent female. The most significant changes in enrollment were in graphic arts, car care and printing.

A review of state plans and accountability reports in Wisconsin provides little evidence of any special activities being conducted in secondary schools to promote sex equity or recruit nontraditional students. Interviews of administrators, State Board program consultants, teachers and counselors confirmed this. Those interviewed indicated that recruitment consisted of what might be termed "passive" recruitment. They gave as examples the school's "open door policy" women and men in nontraditional roles shown in informational pamphlets (a sampling by LWVEF monitors showed this is not always the case), career education centers which provide information on all programs, booths at shooping malls and open houses which offer program information. There are few concerted efforts by districts at the postsecondary level to identify and seek out minorities and the target populations mentioned in Title II of the VEAs (displaced homemakers, single heads of households, homemakers and part-time workers seeking full-time work or job changes who need training or retraining).

Budget cuts strike at some of the more effective avenues for outreach and recruitment or re-entry women. Such has been the case with the Vocational, Technical and Adult Education (VTAE) women's centers/programs. These centers provide career counseling services on campus and occasionally in community based location which strees nontraditional career opportunities. Some offer nontraditional day or evening workshops in conjunction with their own Trade and Industry programs or with local employers, which feature "hands on" opportunities and presentations by nontraditional role models. A few have support groups on campus for re-entry women and/or women in nontraditional programs. Budget cuts resulted in closing the programs in two districts thus far.

There are several conclusions to be drawn from the LWVEF monitoring study. The first, and most important, is that the 1976 VEAs were a major impetus toward addressing the problems of sex discrimination and stereotyping facing women in the vocational education system. There has been slow, but steadily increasing support for sex equity, primarly at the state level. This has been reflected in the expansion of the sex equity staff, in budget increases in a trend towards more stringent requirements governing local school district's applications to states for VEA funds. Most administrators interviewed indicated that as a result of the VEAs some progress has been made, but there is still a long way to go.

Second, community involvement in sex equity issues can have a positive impact at the state and local level. In Iowa, for example, as a result of project activities, members of the Department of Public Instruction (DPI) have become more responsive to the need to improve the status of women in vocational education. This was evidenced by the expansion, in fiscal year 1982, of the model grants program for local school districts initiated in fiscal year 1981. In Wisconsin, during an interveiw with LWVEF monitors, the States Board President of Vocational, Technical and Adult Education recongized the need for the State Board to become more informed about the issue of sex equity. He requested that the sex equity coordinator provided a briefing for that purpose. And in Pennsylvania, LWVEF monitoring in one of the local school districts led to the appointment of a Title IX Coordinator.

Third, program enrollment continues to remain heavily segregated by sex. The major inroads into nontraditional programs have been in those areas which are not heavily sex role stereotyped.

Fourth, there is little financial commitment for support services for women who are entering nontraditional programs. Without auxillary services such as job counseling, job development and job placement, and child care, particularly for disadvantaged women, it is almost impossible to encourage and maintain their enrollment in non-traditional programs. Expenditures for supportive services that are permissive but not mandatory in the legislation are virtually non-existent.

And finally, there is a general lack of commitment on the part of local administrators to achieving sex equity. The best way to describe implementation of the sex equity provisions at the local level is "passive compliance." Little or nothing is done to actively encourage, recruit or support nontraditional students.

While progress has been slow, the LWVUS believes that the 1976 Vocational Education Amendments were a step in the right direction in overcoming sex discrimination and sex stereotyping and in promoting equal access to vocational programs. We are here today to advocate a continued federal role in the promotion of sex equity. As one vocational school principal in Springfield, Massachusetts commented: "All these initial energies (resulting from the 1976 legislation) have been spent cracking the wall. The same amount of energy applied now will produce even greater results. If we stop now the effect will to be seal up that initial crack and thus waste all that initial effort."

The LWVUS believes that the "crack in the wall" can widen even further, if provisions in the current legislation are strengthened and funds are targeted for special purposes. I reiterate our continued support for the following provisions and urge that they be maintained and strengthened in any bill adopted by this subcommittee:

Declaration of purpose

A national objective set out in the "Declaration of Purpose" should be expanded to include the development and implementation of programs to overcome discrimination and stereotyping on the basis of race, national origin, sex, age, income and handicap in all vocational programs in the state, and thereby furnish equal opportunities in vocational education.

Sex equity personnel

The mandated $50,000 set aside should be retained for personnel to work full-time providing technical assistance at the state and local level for the purposes of fostering equal educational opportunities in all vocational programs, and for overcoming sex discrimination and sex stereotyping in vocational programs. The set-aside should be used to pay the salaries of the sex equity coordinator and her or his support staff, as well as expenses incurred in carrying out the coordinator's mandated functions.

Displaced homemakers and other special populations

A set-aside should be retained to provide programs and services to assess and meet the needs of special populations, including displaced homemakers, single heads of households, part-time workers who want full-time jobs, and individuals trained in traditional areas. Given the unique problems faced by teenage parents, we believe they should be served under this section of the Act.

Advisory councils

State advisory councils in vocational education should be retained. Representation of women and minorities on these councils should continue to be required. We believe the councils should play a more active role in assuring equal access to vocational education programs so that vocational education can meet the employment and job training needs of women.

Citizen participation

The citizens participation component of the 1976 legislation should be maintained and broadened at the state and local level. Adequate notification of public hearings on state or local program plans and accountability reports, location of meetings at sites accessible to public transportation and scheduling of hearings early enough in the planning process will provide for more effective and valuable input.

Vocational education data system

The Vocational Education Data System should be maintained and should continue to collect and report data on enrollments and outcomes in vocational education by race, national origin, handicap and by sex within those groups.

Studies have shown that states provided little financial support for programs and services which were permissive in the 1976 legislation. With state and federal cutbacks for education we can anticipate even fewer expenditures in these areas. The LWVUS therefore would add provisions requiring states to target funds for the following purposes:

To provide supportive programs and services to encourage and maintain enrollment in vocational programs leading to gainful employment. Such support services should include but are not limited to job counseling, development and follow-up, and child care.

To develop and implement exemplary programs designed to attract women into nontraditional programs and higher paying jobs. Implementation of model programs in such areas as recruitment, pre- and in-service training in overcoming sex bias for vocational teachers, supervisors and guidance counselors, and programs for special populations are necessary in order to carry out the purpose and intent of the legislation.

To provide for staff development to increase the number of women teaching nontraditional occupations and the number of women in administrative positions.

To provide financial incentives to local school districts and vocational schools to develop and implement exemplary programs to overcome sex bias and discrimination and to recruit females into nontraditional programs.

The LWVUS urges that the above recommendations be incorporated by the subcommittee in any bill adopted. We believe they are necessary to ensure equal opportunity for women and girls, particularly the disadvantaged, in quality vocational educational programs.

APPENDIX A.—AMOUNT OF SEX SEGREGATION IN CLASSES AT EASTERN NORTHAMPTON AVTS—1980

Course	100 percent male	Male dominated	Mixed	Female dominated	100 percent female	Indeterminate
Heating	X					
Appliance repair	X([1])					
Auto body	X					
Auto mechanics		X				
Carpentry		X				
Masonry	X					
Painting/decoration			X			
Plumbing	X					
Building trades		X				
Graphic arts		X				
Machine shop, pract	X					
Welding		X				
Cosmetology				X		
Mill/cabinet	X					
D.O			X			
Material handling		X				
Electronic tech	X					
Scientific data				X		
Mech draft/design		X				
Health asst				X		
Agric. production		X				
Horticulture				X		
Cloth mgmt/prod. serv				X		
Food mgmt./prod. serv			X			
Distributive education				X		
Easton/Wilson Senior High School:						
Comp. Home econ			X			
Accounting				X		
Secretary/steno				X		
General clerical				X		

[1] Terminated.

Note: Male dominated programs are those programs in which 80 percent or more of the students enrolled are male, mixed programs are those programs in which less than 80 percent but more than 20 percent of the students may be of the same sex, and female dominated programs are those programs in which 80 percent or more of the students enrolled are female.

APPENDIX B.—SEX DISTRIBUTION IN CLASSES AT EASTERN MONTGOMERY COUNTY AVTS—1980

Course	100 percent male	Male dominated	Mixed	Female dominated	100 percent female	Indeterminate
Appliance repair	X					
Auto body		X				
Auto mechanics	X					

APPENDIX B.—SEX DISTRIBUTION IN CLASSES AT EASTERN MONTGOMERY COUNTY AVTS—1980—Continued

Course	100 percent male	Male dominated	Mixed	Female dominated	100 percent female	Indeterminate
Commercial art		X				
Carpentry		X				
Plumbing	X					
Bldg. trades, main.	X					
Electrical occup	X					
Graphic arts			X			
Machine shop pract		X				
Welding	X					
Cosmetology				X		
Sm. engine repair	X					
Electronics tech	X					
Scientific data proc				X		
Draft/design tech	X					
Nursing asst/aide				X		
Horticulture				X		
Food mgmt/prod. serv			X			
Distributive education					X	
Abington H.S.:						
Comp. Home ec				X		
Accounting				X		
General clerical				X		
Secretary/steno					X	
Cheltenham H.S.:						
Comp. home ec					X	
Accounting			X			
General clerical				X		
Secretary/steno					X	
Jenkintown H.S.:						
Accounting					X	
General clerical					X	
Secretary/steno					X	

Note.—Male dominated programs are those programs in which 80 percent or more of the students enrolled are male, mixed programs are those programs in which less than 80 percent but more than 20 percent of the students may be of the same sex, and female dominated programs are those programs in which 80 percent or more of the students enrolled are female.

ADDENDUM TO PREPARED STATEMENT OF ANNE SCHINK, PROGRAM VICE-PRESIDENT AND DIRECTOR OF WOMEN'S ISSUES, LEAGUE OF WOMEN VOTERS OF PENNSYLVANIA

IDAHO

Passage of the 1976 Vocational Education Amendments provided the impetus for improving the status of women in vocational education programs. At the state level a full-time sex equity coordinator was appointed in October, 1977, and a sex equity advisory committee in 1978. The amount of federal dollars budgeted for sex equity personnel has increased from $35,975 in fiscal year 1978 to $45,929 in fiscal year 1980. Mini-grants have also been awarded to Local Education Agencies for projects and programs addressing the needs of women and for overcoming sex bias. In fiscal year 1980, $10,000 in state money was allocated for local and regional personnel training in sex equity. Workshops have been conducted, consultations held, technical assistance given and materials disseminated to administrators, teachers, counselors and other interested groups and individuals. State administrators have been responsive to comments from the public and from the Idaho State Advisory Council of Vocational Education. The Council and others have recommended continuance of efforts to encourage males and females to explore nontraditional careers. The state's activities appear geared toward that end.

While some commitment has been made in Idaho, budget cutbacks will affect future sex equity expenditures. Expenditures have been cut back in all areas of state government due to statutory restrictions caused by passage of the 1 percent initiative and subsequent legislative actions. Should the federal government eliminate mandates for spending funds in certain categories, it is anticipated that funding earmarked for specialized programs, sex equity programs and research activities would be channeled directly into vocational instructional programs. State money allocated for sex equity has already decreased from $11,380 in fiscal year 1979 to zero in fiscal years 1981 and 1982. Many of those interviewed felt that the $50,000 allocated for sex equity and for the sex equity coordinator could be better spent on program costs.

Four local school districts were monitored in Idaho: Aberdeen, Jerome, Jt., Twin Falls and Buhl, Jt. Two community colleges were also monitored: the College of Southern Idaho and Eastern Idaho Vocational Technical School. Observations by the project coordinator include the following:

The local school districts in Idaho do not offer a wide range of courses under each program area. Production Agriculture, for instance, is listed as Agriculture I, II, III, and IV, whereas in larger school districts elsewhere in the country horticulture, forestry, agricultural mechanics, etc., may be listed under the general heading of Agriculture. However, monitors noted that in three of the four districts female enrollment in broad nontraditional categories is actually declining, and their enrollment in traditional programs such as consumer and homemaking is increasing. At the College of Southern Idaho fashion merchandising remained 100 percent female between 1978–1980, and office occupations rose from 89.1 percent female graduates in 1978 to 100 percent in 1981. No females have graduated between fiscal year 1978 and fiscal year 1981 in auto body repair, food service, small engine mechanics and industrial plant maintenance mechanics. Female enrollment in nontraditional courses in Eastern Idaho Vocational Technical School has fluctuated. For example, the number of females in welding increased from no enrollments in fiscal year 1976 and fiscal year 1977 to 4.1 percent in fiscal year 1980, with a drop to 1.7 percent in fiscal year 1981. No women have been enrolled in agricultural mechanics or diesel mechanics between fiscal year 1976 and fiscal year 1981. In the less heavily sex stereotyped courses, such as merchandising and market management, there has been a fairly equal distribution of females and males.

Students do not receive sufficient information about career opportunities. According to a 1980 Idaho Advisory Council on Vocational Education study, one-third of all high school completers were dissatisfied with the career information available at their schools. And one-third of the respondents at both the high school and post-secondary levels were dissatisfied with opportunities for women to learn about male dominated careers. Project monitors found that counselors do not appear to be playing an active role in publicizing nontraditional occupations or in recruiting nontraditional students.

Although the state and local vocational education plans reviewed and the administrators interviewed did indicate support for equal access and the elimination of sex bias and stereotyping, project interviewers were confronted with frank statements of bias against females in nontraditional programs from one instructor and implied bias from others. For example, one post-secondary instructor said "women have to seek a place of less physical efforts in industry . . . have to seek areas where they fit in." A secondary teacher said that "it is foolish to think that men and women can do the same job . . . women have better dexterity, men have greater strength." Clearly, there is a need for more attitudinal change and awareness heightening activities for instructors at the secondary and post-secondary levels.

Action to support the strong commitment expressed by the administrators was found lacking. None of the districts monitored had budgeted funds for sex equity activities. Administrators pointed to the indirect costs associated with as basic a sex equity goal as reviewing and replacing materials that depict sex bias and stereotyping. In a 1981 report on a survey conducted for the Sex Equity Division of the Idaho Department of Education it was found that women faculty in the post-secondary vocation technical programs received lower salaries than did men. There also seemed to be some confusion between Title IX and Title II. Many of the administrators were under the impression that if their institutions conform to Title IX they automatically conform to Title II of the 1976 Vocational Education Amendments.

In January, 1980, the Sex Equity coordinator conducted a survey to determine the nature and extent of Title IX compliance in Idaho's school districts and to identify areas in need of continued consultative services and technical assistance from the Idaho Department of Vocational Education. Analysis of the response indicated a need for technical assistance in guidance and counseling, and in the area of training agreements between employers and students in cooperative education.

Mr. ERDAHL. Thank you very much, Ms. Schink.

The next person on our panel today is Janet Wells, program associate, Federal education project, Lawyers' Committee for Civil Rights Under Law.

STATEMENT OF JANET WELLS, PROGRAM ASSOCIATE, FEDERAL EDUCATION PROJECT, LAWYERS' COMMITTEE FOR CIVIL RIGHTS UNDER LAW

Ms. **WELLS**. Mr. Chairman, my name is Janet Wells, and I am testifying today on behalf of the Federal education project of the Lawyers' Committee for Civil Rights Under Law.

My testimony is endorsed by 17 organizations participating in the National Coalition for Women and Girls in Education, a federation of national organizations which take joint actions on issues affecting the rights of women and girls in elementary, secondary, postsecondary and vocational education.

We deeply appreciate the fact that this subcommittee has once again demonstrated its concern about sex bias in vocational education. No debate about the role the Federal Government should play in vocational education should ignore the frightening statistics which describe the plight of 12 million American women of working age who live in poverty and the fact that women are both role model and breadwinner for millions of American children.

In one-seventh of the households in this country, a single woman alone must assure the security of her family. Women are poorly served in federally funded programs because their unique needs are not taken into consideration when laws are written and programs designed. Women are poor for different reasons than men—including sex discrimination in education and employment and the fact that they are primarily responsible for child care—but Federal programs rarely recognize these differences.

Again and again in our interviews with persons who work with disadvantaged women, we have been told that lack of transportation is the major barrier poor women face in seeking job training. State and local educational agencies have not used Federal funds to construct and equip modern vocational education facilities in our inner cities, and thus quality vocational education programs are not accessible to hundreds of thousands of the Nation's inner city minority and poor people. How is a woman on public assistance, without an automobile or public transportation, to obtain access to a suburban vocational school 20 miles away? This is not a question that vocational education has dealt with.

Child care, of course, is another problem for the teenage mother and single head of household. Congress recognized that fact in 1976 and authorized child care for the children of vocational education students. The results have been singularly disappointing. In 1979, only seven States reported spending VEA funds for child care.

Administrators of vocational education programs argue that Federal appropriations have never been sufficient to enable them to provide these kinds of auxiliary programs. We are sympathetic to this argument, but we have heard these same administrators complain that the 1976 amendments set aside too much money for the disadvantaged and that there are no excess costs involved in serving disadvantaged students.

We believe these funds could have been used effectively for supportive services like child care and transportation. Complaints about the set-asides to pay 100 percent of the cost of educating disadvantaged students, thus removing any incentive to provide supportive services needed by disadvantaged women and girls.

In preparing for this hearing, we set out to show that there has been a large increase in the percentage of female vocational education students who enroll in training for higher paying, traditionally male jobs. We found only two significant changes in enrollments:

A higher proportion of women now elect training for paid employment, rather than nongainful home economics.

There has been a significant reduction of sex-segregation within the major vocational program areas.

But in 1978, only 1.2 percent of the women in vocational education were in technical programs. The increase between 1972 and 1978 in the proportion of female vocational students in the other two traditionally male programs—agriculture and trade and industrial education—was less than 2 percent.

It was also disturbing to note that less than 11 percent of the students in industrial arts were females. These data suggest that very few women and girls are being given a preparatory education for nontraditional vocational education and industrial jobs.

We strongly believe that the progress we have made is largely attributable to the role the Federal Government has played in creating sanctions through title IX and incentives through the Vocational Education Act Amendments of 1976 to encourage State and local educational agencies to enroll more males and females in nontraditional vocational programs. Our organizations strongly support the 1976 amendments and urge this subcommittee to extend and strengthen them. Published research and our own observations convince us that where they were implemented well or their spirit enforced, they worked.

Compliance with and enforcement of the 1976 amendments has, unfortunately, however, been weak and half-hearted in most of the States. The NIE vocational education study sums up the problem clearly:

While the 1976 amendments strengthened some of the equity instruments of the VEA, they also continued to give the States a great deal of discretion over whether or not they would further this goal of the law. Technically speaking, then, States and localities could be in compliance with the letter of the law while choosing to ignore its intent.

This is exactly what happened. The Office of Education in HEW, and later the Department of Education, served notice to the States that they were responsible for meeting only the strictest letter of the law, not for using Federal funds to carry out its purposes.

The NIE study concluded that most States have set aside only "paltry sums" from their basic VEA grants for sex equity, made only a "token gesture" toward providing services for displaced homemakers, and relied on "symbolic gestures" instead of providing real incentives to encourage local educational agencies to enroll students in nontraditional programs. NIE concluded that less than 1 percent of all State basic grant money in 1979 was spent for displaced homemakers, support services for women seeking to enter nontraditional vocational education and child care. Only 0.2 percent of all State and local matching funds went for these activities.

Five years after Congress passed the Vocational Education Act amendments, we still support the law and its intent. But we also agree with a major conclusion of the NIE study: The sex equity provisions of the VEA are . . . mainly hortatory; much is authorized, but little is required. Although the VEA's declaration of purpose faithfully reflects the intent of Congress to eliminate sex discrimination and sex role stereotyping, as it was expressed in the legislative history of the 1976 amendments there is a considerable gap between the prominence that the language of the law gives to this objective and the programmatic instruments that were devised to transform congressional intent into State and local action.

We are here today to ask you to give the Vocational Education Act the "programmatic instruments" it needs to assure that more effort is made at the local level to overcome the effects of a long history of sex discrimination and stereotyping in vocational education and to provide better vocational opportunities for low-income women. While antipoverty programs of the past decade and a half have alleviated poverty for men and families in which a male breadwinner is present, the economic crisis of women and female-headed households is growing more severe.

Although we anticipate that the administration will ask for a block grant for vocational education, we urge this subcommittee to seek a stronger targeting of VEA funds to assure that special needs and national objectives are met with Federal funds.

We recommend that the following provisions be included in the bill this subcommittee adopts:

Retention of personnel to overcome sex bias. The small $50,000 set-aside to pay the expenses of full-time personnel working on sex discrimination issues in the State educational agencies has been one of the most effective VEA expenditures. It has given the sex equity issue strong visibility within the State and provided State and local educational agencies technical assistance most of them would not otherwise have had in eliminating sex discrimintion and stereotyping and complying with both the VEA and civil rights statutes. We urge that the $50,000 set-aside be retained and that the law continue to designate that the State must have at least one person who works full time in assisting the State in eliminating sex discrimination and stereotyping in State and local vocational education programs.

Require funding of programs that enhance opportunities for women in vocational education. Congress should require the States to expend funds to:

Support special vocational education programs and supportive services for persons who suffer economic hardship due to sex bias and discrimination in education and employment and for displaced homemakers, single heads of household and teenage parents.

Continue to collect and report data on enrollments and outcomes by race and handicap and by sex within those groups.

Continue to require appropriate representation of women and minorities on advisory councils. One of the 1976 amendments' most successful efforts was to increase the participation of women on advisory councils.

Target more VEA funds on disadvantaged populations and economically depressed areas, especially urban areas. Women and men with the greatest need for job training are in the cities, but they have received the least benefit from the law.

Mr. **Erdahl.** Thank you very much, Ms. Wells.

[The prepared statement of Janet Wells follows:]

Prepared Statement of Janet Wells, Program Associate, Federal Education Project, Lawyers' Committee for Civil Rights Under Law

ENDORSED BY THE FOLLOWING ORGANIZATIONS IN THE NATIONAL COALITION FOR WOMEN AND GIRLS IN EDUCATION

American Association of University Women.
American Educational Research Association—Women's Groups.
American Personnel and Guidance Association.
Displaced Homemakers Network, Inc.
National Association of Commissions for Women.
National Commission on Working Women, Center for Women and Work.
National Education Association.
National Federation of Business and Professional Women's Clubs, Inc.
National Student Educational Fund.
National Women's Political Caucus.
National Women's Studies Association.
Project on Equal Education Rights, NOW Legal Defense and Education Fund.
Sociologists for Women in Society.
Southern Coalition for Educational Equity.
United States Student Association.
Wider Opportunities for Women.
Women's Equity Action League.
National Women's Law Center.

Mr. Chairman, my name is Janet Wells, and I am testifying today on behalf of the Federal Education Project of the Lawyers' Committee for Civil Rights Under Law. The Federal Education Project has worked since 1975 to improve federal policies affecting the rights and opportunities of women in vocational education, and we have monitored federal enforcement and state implementation of the current amendments to the Vocational Education Act since their passage in 1976.

My testimony today is endorsed by 18 other organizations participating in the National Coalition for Women and Girls in Education. The Coalition is a federation of national organizations which take joint actions on issues affecting the rights of women and girls in elementary, secondary, postsecondary and vocational education, and its members regard the Vocational Education Act amendments of 1976 as one of the strongest and most important federal laws Congress has passed to assure equal opportunity for women and girls in a specific educational program.

We deeply appreciate the fact that this subcommittee has once again demonstrated its concern about sex bias in vocational education by holding oversight hearings. Often in the continuing debate about the role the federal government should play in job training, it seems to us that governmental and institutional leaders forget what a huge social and economic price this country pays for failing to educate its female citizens more effectively for employment.

During the past year, a new phrase has entered the national terminology to describe the phenomenon of the ever-increasing percentage of the poor who are women: "the feminization of poverty." The National Advisory Council on Economic Opportunity has described this phenomenon:

Almost one female-headed family in three is poor, compared to about one in 18 headed by a man.

The decline in poverty during the past decade has been almost entirely in families headed by men.

The median income in 1977 of families headed by single mothers was only $340 above the poverty level. The median income of families headed by black and Hispanic mothers was almost $1,000 below the poverty level.

Occupational segregation confines women to jobs where the pay is low and mobility is little or nonexistent. Sixty percent of all women workers are found in 10 occupations.

The Council attributed "the crippling poverty of single mothers" to "both their exclusion from steady work and the rock-bottom wages received when working regularly."

"Women's earnings are often so low that even full-time work is no security against poverty," said the Council's 1980 annual report, which also predicted that the feminization of poverty will continue because the income gap is widest between young men and young women.

"A young woman heading a family in 1967 was bout five times more likely than a young man to be poor; by 1977, nine times," reported the Council. "It is among the rising generation of young women, then, that the poverty of the 1970s has been most devastating, and the outlook for the 1980s is most bleak."

No debate about the role the federal government should play in vocational education should ignore these frightening statistics and the fact that women are both role model and breadwinner for millions of American children. Nor should we overlook the fact that women are heads-of-household when we consider the role federal policy should play in strengthening the family. Nothing is more devastating to family security and stability than the inability of parents to earn a livelihood substantial enough to assure that their children are well-fed, well-clothed and well-educated; and for one-seventh of the households in this country, it is a single woman who alone must assure the security of the family.

In spite of the national concern about youth unemployment (which goes back to the original passage of the Vocational Education Act in 1963), we go on designing vocational education and training programs for disadvantaged youth which permit the exclusion of young women or track them into training for female-intensive jobs which pay little, if any, more than public assistance.[1] We simply overlook the fact that most youth unemployment and its attending social problems are rooted in the unemployment and underemployment of millions of women who head households.

Although more than half the participants in vocational education nationally are women and girls, data collected by the federal Bureau of Occupational and Adult Education for 1978 showed that only 42 percent of the disadvantaged students in vocational education were female. Only 43 percent of the work study students—participating in programs designed to sustain them financially while in vocational education—were female. Handicapped students have always been shamefully underrepresented in vocational education, but BOAE data showed that female handicapped students were underrepresented to an even greater degree than males: only 39 percent of the handicapped students in vocational education in 1978 were females.

Some exclusion of females from job training programs occurs because the programs were developed principally for males, whose social behavior is often of greater immediate concern to those who design programs. But we believe females are more often excluded because their unique needs are not taken into consideration when laws are written and programs designed. Women are poor for different reasons than men are—including sex discrimination in education and employment and the fact that they are primarily responsible for child care—but federal programs rarely recognize these differences. Again and again in our interviews with persons who work with disadvantaged women, we have been told that lack of transportation is the major barrier poor women face in seeking job training. State and local educational agencies have underutilized VEA, state and local funds to construct and equip modern vocational education facilities in our inner cities, thus leaving quality vocational education programs inaccessible to hundreds of thousands of the nation's inner city minority and poor people. (We in Washington often forget that most of the nation's towns and cities have only a vestige of public transportation and that often these systems are not coordinated with school schedules. We also tend to forget that every American does not own an automobile. Many of the poor, especially poor women, do not.) Lack of transportation creates a formidable barrier for poor women, who frequently must coordinate transportation with child care and for whom personal safety is a major consideration.

Child care, of course, is another problem for the teenage mother and single head-of-household. Congress recognized that fact in 1976 and authorized day care for the children of vocational education students as an appropriate expenditure of VEA funds. The results have been singularly disappointing: In 1979, only seven states reported spending federal or state and local funds for child care, and according to the National Institute of Education study of vocational education released to this subcommittee October 21, only two states (Washington and Oregon) accounted for more than half the sum spent nationally.

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[1] The Department of Labor's 1978 Continuous Longitudinal Manpower Survey showed three times as many male as female youth enrolled in the Youth Community Conservation and Improvement Projects program under CETA, and women have never come close to constituting half the enrollees in the Job Corps, which is regarded by many as one of the most successful federal job training efforts. Programs, moreover, are sex-stereotyped. In the Youth Employment and Training Program (YETP), for example, 55 percent of the jobs in which enrollees participated in 1978 employed only male or only female participants. Almost half the girls in YETP were in clerical jobs—not a very auspicious circumstance for disadvantaged youth considering that one-third of all clerical workers make less than $7,750.

Administrators of vocational education programs counter these accusations of failure to provide supportive services for disadvantaged women and girls with the argument that federal appropriations have never been sufficient to enable them to provide these kinds of auxiliary programs. We are sympathetic to this argument but still skeptical when we hear some of these same administrators complain that the 1976 amendments set aside too much money for the disadvantaged and that there are no "excess costs" involved in serving disadvantaged students. These are funds which could have been used more effectively for supportive services like child care and transportation. Unfortunately, administrators' complaints about the basic grant set-asides for the disadvantaged and handicapped have led the Office of Vocational and Adult Education to draft proposed changes in the VEA regulations which would permit the set-asides to pay 100 percent of the cost of educating disadvantaged students, in violation of this subcommittee's intent in the 1976 amendments. If this regulatory change occurs, state and local educational agencies will have even fewer incentives to provide the special services disadvantaged women and girls need in order to succeed in vocational education.

Inability to participate in federally funded vocational education, job training and employment programs is only one problem faced by women and girls. For the vast majority of those who enter the programs, sex bias, discrimination and stereotyping still lead them into training for traditionally female, low-paying jobs. As the National Institute of Education concluded in a 1978 study entitled "Occupational Segregation," "Women are clustered in the lower-paying, less prestigious occupations in CETA (and in the Job Corps) and are enrolled in vocational programs which will continue the same pattern of occupational segregation currently typifying the labor force."

In preparing for this hearing, we set out to show that there has been a large increase since 1972 in the percentage of female vocational education students who enroll in traditionally male programs. But in comparing federally collected data for 1972, 1977, 1978 and 1979, we found only two significant changes in enrollments:

A higher proportion of women and girls in vocational education now elect training for paid employment. In 1972, almost half of all female vocational students were enrolled in non-gainful home economics; by 1978, there had been a 12.2 per cent decrease in non-gainful home economics students.

There has been a significant reduction of sex-segregation within the major vocational program areas. The proportion of female to male enrollment in agriculture increased almost 14 per cent between 1972 and 1979, while the proportion of males in home economics increased 13 per cent. Moreover, there was a 7.8 per cent increase in the proportion of females to males in technical programs.

The data are not wholly encouraging, however. The proportion of women in vocational education who were taking technical courses doubled between 1972 and 1978—but still only 1.2 per cent of women in vocational education were in technical programs. This is a disturbing statistics since technical workers are in critical demand, wages are high and technical workers are in critical demand, wages are high and technical jobs have few of the disadvantages, such as heavy lifting and harsh working conditions, which are often cited as barriers to women's participation in other traditionally male programs. The increase in the proportion of female vocational students enrolled in the other two traditionally male program areas, agriculture and trade and industrial education, was less than 2 per cent. In fact, the largest increase was in the traditionally female area of office occupations, where 30.5 per cent of all female vocational students were enrolled in 1972 and 35.1 per cent were enrolled in 1978. In 1979, 73.5 per cent of all students in office occupations were female.

It is also disturbing to note that the Vocational Education Data System for 1979 showed that less than 11 per cent of the students in industrial arts programs were females. These data suggests in industrial arts programs were females. These data suggest that very few women and girls are being given a preparatory education for nontraditional vocational education and industrial jobs.

The National Advisory Council on Women's Education Programs (NACWEP) recently released a status report on Title IX of the 1972 Education Amendments entitled "The Half Full, Half Empty Glass." The title is very descriptive of the way in which we view sex equity in the United States today. On the one hand, the increase in the percentage of women and girls being trained for paid employment and the decrease in the concentration by sex within programs encourages us to believe that we have made great strides towards economic self-sufficiency for women, domestic self-sufficiency for men, and wider personal and occupational choices for both. On the other hand, we are faced with statistics which show that sex stereotypes, bias and discrimination still affect the choices of most men and women when they enter vocational education. We have come a long way, but equal educational and economic opportunity are still far from a reality in the vocational education program.

We strongly believe that the progress we have made is largely attributable to the role the federal government has played in creating sanctions—through Title IX—and incentives—through the Vocational Education Act amendments of 1976—to encourage state and local educational agencies to enroll more males and females in nontraditional vocational programs. Passage of the 1976 sex equity amendments was an exceptional efforts by this subcommittee and Congress to acknowledge the detriment to the American economy and to American women of continuing a national vocational education system which systematically tracked persons into the work place according to their sex. Advocacy groups, including the Federal Education Project and the National Coalition for Women and Girls in Education, strongly supported passage of the 1976 amendments and have welcomed their achievements:

The progress in enrollments already cited.

The addition to each state department of education of at least one professional staff member qualified to give technical assistance and support to other state and local officials and instructors in overcoming sex bias and discrimination in the vocational education system.

A fledgling movement within vocational education—stronger in some states than in others—to meet the needs of displaced homemakers and other older women entering the work force.

A substantial increase in the number of women serving on state vocational education advisory councils.[2]

An increased awareness among many instructors and administrators of the value of nontraditional enrollments as both the number and quality of students have increased.

Extensive revision of recruitment, counseling and curricular materials to eliminate sex biased and stereotyped texts and illustrations.

Greater public understanding of vocational education and sex ec [illegible] and public participation in the state and local planning process as a [illegible]al public information and participation requirements.

Our organizations still strongly support the 1976 Vocational [illegible] Amendments and we urge this subcommittee to extend and strengthen [illegible] lished research and our own observations have convinced us that where [illegible] implemented well or their spirit enforced, they worked. The Nation[illegible] Council on Women's Educational Programs and the National Advisory [illegible] Vocational Education concluded in their 1980 joint report entitled "Inc[illegible] Equity" that where compliance with the 1976 amendments had been stro[illegible] timate goal had been achieved: women's enrollment in nontraditional progr[illegible] creased. Both NACVE/NACWEP and the American Institutes for Research, [illegible] conducted the Congressionally authorized "Vocational Education Equity Study [illegible] 1979, concluded that schools which conduct activities to further sex equity achieve the highest nontraditional enrollments.

As we have already noted, of course, the percentage of women in vocational education enrolling in nontraditional programs is still very small. This is because compliance with and enforcement of the 1976 amendments has been weak and half-hearted in most of the States. The NIE vocational education study sums up the problem clearly:

> * * * (A)lthough Congress made it clear that one of its chief priorities for vocational education was to increase access for women and individuals with special needs, and while the theme of equity pervades the law, much is authorized and relatively little required. In short, while the 1976 amendments strengthened some of the equity instruments of the VEA, they also continued to give the states a great deal of discretion over whether or not they would further this goal of the law. Technically speaking, then, states and localities could be in compliance with the letter of the law while choosing to ignore its intent.

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[2] In 1976, Congress found that only 14 per cent of persons serving on state advisory councils were women. A Federal Education Project survey of councils in 1980 showed that the number had increased to 35 per cent since the VEA had been amended to require an appropriate representation of women on the councils.

We submit that this is exactly what happened: the Office of Education in HEW and later the new Department of Education served notice to the States that they were responsible only for meeting the strictest letter of the law, not for using federal funds to carry out its purposes. Thus, although every state was required to assess the needs and provide special programs for displaced homemakers, single heads-of-household and other special groups designated in section 120(b)(1)(L) of the act, a state could report no expenditures for these purposes and still have its annual program plan approved by the federal government. An analysis of annual accountability reports showed that in 1979, this happened in at least five states and perhaps as many as 13. Thus, OVAE insisted repeatedly to the ACLU of Georgia that the state needed only to have something it called incentives for local educational agencies to encourage nontraditional enrollments and to conduct model sex equity programs; the state did not, OVAE maintained over many months, need to show that the incentives had actually been implemented or that they had any effect.

Only last year, after inquiries from the Federal Education Project and others, did OVAE develop a policy to find out whether state advisory councils on vocational education were appropriately constituted with regard to female and minority membership.

Federal vocational education officials have long sympathized with the states' desire for a federal law with no requirements for meeting national objectives or providing equal access and opportunities for women, the disadvantaged, and the handicapped. However, only under the current administration have those officials dared to try to subvert Congressional intent and to change the law through regulatory revision. As noted earlier, OVAE has drafted proposed changes in the VEA regulations which would permit states to spend basic grant set-aside funds for the disadvantaged and handicapped to pay 100 per cent of the costs of vocational education for those students, rather than only the excess costs. The same draft regulations would permit the states to disperse the functions of the full-time sex equity personnel among any number of employees who did not work full time on sex discrimination issues and whose effectiveness, given other demands, would be questionable. There is no statutory language or legislative history which supports these regultory moves, only a desire to make the Vocational Education Act a block grant.

Secretary of Education Bell has admonished us several times to "trust" the Federal government and the state governments to do the right thing with regard to assuring equal access to education, even if civil rights enforcement is curtailed and education programs designed to provide equal opportunities are reduced to block grants. Implementation of the 1976 amendments provides a good example of why most states have not won our trust and why we believe provisions are needed to strengthen, not weaken, the ability of the Vocational Education Act to create equal opportunities and meet national objectives.

The NIE study concluded that most states have set aside only "paltry sums" from their basic VEA grants for sex equity, made only a "token gesture" towards providing services for displaced homemakers, and relied on "symbolic gestures" instead of providing real incentives to encourage local educational agencies to enroll students in nontraditional programs. NIE analyzed data reported by the Vocational Education Data System for all 50 states and concluded that less than 1 percent of all state basic grant money in 1979 was spent for displaced homemakers, support services for women seeking to enter nontraditional vocational education and child care. Only 0.2 percent of all state and local matching funds went for these activities. Moreover, five states—California, Missouri, New York, Washington and Massachusetts—spent 60 percent of all outlays nationally for displaced homemakers. California, Oregon and Washington accounted for two-thirds of the expenditures for supportive services for women entering nontraditional programs.

Moreover, everyone who has looked at the state planning process has found that the requirement for policies and procedures to overcome sex discrimination was a failure in most states. While the NACVE/NACWEP study showed a correlation between nontraditional enrollments and good state planning procedures, the typical state plan parroted the language in the law and showed little initiative in instituting policies and activities to overcome a long history of discrimination and stereotyping. The federal government, still more concerned with the letter of the law than its intent, has done little to encourage stronger or more effective state planning for sex equity. If anything, it has signaled the states that nothing is required.

Five years after Congress passed the Vocational Education Act amendments, we still support the law and its intent. But we also agree with a major conclusion of the NIE study:

The sex equity provisions of the VEA are . . . mainly hortatory; much is authorized, but little is required. In this sense, although the VEA's declaration of purpose faithfully reflects the intent of Congress to eliminate sex discrimination and sex role stereotyping, as it was expressed in the legislative history of the 1976 amendments, there is a considerable gap between the prominence that the language of the law gives to this objective and the programmatic instruments that were devised to transform Congressional intent into state and local action.

We are here today to ask you to give the Vocational Education Act the "programmatic instruments" it needs to assure that more effort is made at the local level to overcome the effects of a long history of sex discrimination and stereotyping in vocational education and to provide better vocational opportunities for low-income women. More than 12 million American women of working age are in poverty, and most of the nation's 10 million poor children live with them. While anti-poverty programs of the past decade and half have alleviated poverty for men and families in which a male breadwinner is present, the economic crisis of women and female-headed households is growing more severe. The Vocational Education Act must direct funds to programs to overcome the factors which lock women and girls out of the vocational education system and the job market and into low-paying jobs.

Although we anticipate that the Administration will ask for a block grant for vocational education, we urge this subcommittee to seek a stronger targeting of VEA funds to assure that special needs and national objectives are met with Federal funds. Eighteen years of experience with the Vocational Education Act have shown that national objectives will not be met without strong targeting.

We recommend that the following provisions be included in the bill this subcommittee adopts:

Purpose

The Declaration of Purpose should set out national objectives to be met by the act, including developing and carrying out programs to overcome discrimination and stereotyping on the basis of race, natinal origin, sex, age, income or handicap in all vocational education programs in the state.

Full-time personnel to overcome sex bias

The small $50,000 set-aside to pay the expenses of full-time personnel working on sex discrimination issues in the state educational agencies has been one of the most effective VEA expenditures. It has given the sex equity issue strong visibility within the state and provided state and local educational agencies technical assistance most of them would not otherwise have had in eliminating sex discrimination and stereotyping and complying with both the VEA and civil rights statutes. We urge that the $50,000 set-aside be retained and that the law continue to designate that the state must have at least one person who works full time in assisting the state in eliminating sex discrimination and stereotyping in state and local vocational education programs.

Funding of programs

Given an option—as they were in 1976—of spending federal funds to maintian existing programs or to meet national objectives for providing equal opportunities for special needs populations, the evidence shows clearly that states will largely ignore national objectives. We urge, therefore, that the subcommittee provide for funds to be spent specifically:

(*a*) to fund special vocational education programs and supportive services designed to overcome barriers to students' participation in nontraditional vocational education programs and to ensure their entry into and success in nontraditional jobs, including exemplary programs,

(*b*) to provide special vocational education programs and supportive services for persons who suffer economic hardship due to sex bias and discrimination in education and employment or because of their failure to find permanent or adequate financial security in their tradiitional roles as homemakers, part-time workers or employees in traditional jobs, including displaced homemakers, single heads of household, persons receiving public assistance and teenage parents, and

(*c*) to provide a state discretionary program to create incentives for local educational agencies and schools to overcome sex bias and stereotypeing in their vocational education programs.

Data collection

The Vocational Education Act should continue to require the collection and reporting of data on enrollments and outcomes in vocational education by race, national origin and handicap and by sex within those groups. Such data is critical to evaluating the equity with which vocational education serves these special populations and the needs which federal legislation should try to meet.

Advisory councils

One of the 1976 amendments' most successful efforts was to increase the participation of women on state advisory councils. The requirement for appropriate representation of women and minorities on vocational education advisory councils should be maintained to assure that there are members on those councils who help to evaluate programs' services to special population groups.

State and local planning

The state planning process continues to be a disappointing means to assure that national objectives are met in vocational education, but we urge that a strong planning process for achieving sex equity be maintained because research has demonstrated that when planning is done well, it achieves results. We urge also that planning to overcome sex discrimination and stereotyping and to meet special needs of women and girls in vocational education be instituted in the local planning process as well.

Finally, we urge that more Vocational Education Act funds be targeted on disadvantaged populations and economically depressed areas, especially the nation's major cities. The women and men with the greatest need for job training are in these areas, and yet they have received the least benefit from federal dollars distributed under this law. Equality of economic opportunity must be a goal of the Vocational Education Act.

PERCENTAGE OF WOMEN IN VOCATIONAL EDUCATION WHO ARE IN EACH PROGRAM AREA

Program	1972	1977	1978	
Agriculture	.8	2.3	2.4	+1.6
Distributive	4.9	6.4	5.7	+.8
Health	4.8	7.8	6.1	+1.3
Homemaking	49.5	38.2	37.3	−12.2
Gainful home economics	4.1	4.9	5.7	+1.6
Office	30.5	32.5	35.1	+4.6
Technical	.6	1.2	1.2	+.6
Trade and industrial	4.8	6.8	6.5	+1.7

Mr. **ERDAHL**. The next participant is Gann Watson, executive assistant and staff associate, southeastern public education program, Columbia, S.C.

STATEMENT OF GANN WATSON, EXECUTIVE ASSISTANT AND STAFF ASSOCIATE, SOUTHEASTERN PUBLIC EDUCATION PROGRAM, COLUMBIA, S.C.

Ms. **WATSON**. Good morning. I work for the Gender Equity Project for the southeastern public education program in Columbia, S.C.

SEPEP is a private, nonprofit organization whose purpose is to promote and assure access of children from minority and low-income families to quality public education.

I am here today to discuss sex equity and how it relates to vocational education. If I may begin by suggesitng that sex equity is not solely a feminist issue. The issue here really is quality vocational training which ultimately provides useful, usable skills for students in the job market when they graduate from high school. That this particular issue and this goal poses unique problems and obstacles for young women in vocational training is why sex equity is of such vital concern to all of us.

The current status of young women in useful, relevant vocational training programs speaks for itself. The numbers are just not there. So that when educators claim that the purpose of vocational training is to prepare and train the labor force for the future, I wonder if they are talking only of the male members of that labor force. Indeed, one might also wonder if even the males are being adequately prepared for the level of technology which is rapidly dominating the business and industrial workplace.

I have interviewed many members of business and industry in rural and urban areas in South Carolina, representing low, middle and high technology business, and each one of them has indicated certain dire needs of vocational education and education in general needs to look at. For instance, students entering the work force after graduation need better training and a better understanding of very basic mathematics. Students also need intensive career counseling about the world of work.

They do not understand when they graduate from vocational programs in particular, what it is that industry requires of them, what they will be expected to do and what they can expect from the work force. The skills training that would make students the most immediately employable and offer the most potential for advancement are in the areas of industrial maintenance workers—that is, persons who know how to keep the machines running, which keeps production up—machine tool and die makers and electricians. Tool and die makers are all but immediately employable and persons with backgrounds and knowledge of drafting, mechanics and electricity are sorely needed.

In South Carolina there are 128,000 students enrolled in vocational education at the secondary level. Approximately 64,000—50 percent—are young women. How well are these young women being prepared for the jobs that industry claims it has ready for them?

Remember that industry is crying for skilled machine tool and die workers and that these skills are enhanced by a background in drafting, mathematics, mechanics and electricity. Of the 64,000 females enrolled in vocational education, 21 are enrolled in machine shop courses (compared with 941 males). Of the 64,000 enrolled in vocational education, 139 are in drafting programs (compared with 907 males),[1] and 111 of 64,000 are enrolled in electricity classes (compared with 1,863 males).

In contrast, 1,600 are enrolled in industrial sewing programs. In Columbia alone, a city of about 200,000, there are not enough industrial machinists to meet the needs of industry. So great is this need that industrial employers in one particular area of town, which happened to be located near one particular vocational center, compete with one another for students from this vocational center machine shop.

There are 28 students enrolled in this machine shop class, 25 of them are boys, three of them are girls. There is 100 percent placement of these students either immediately upon, or even prior to in some cases, graduation.

One personnel manager in one of these industries told me they would adjust my production schedule immediately for one student to work in his industry from that machine shop class. Within a 25-

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[1] Vocational Education School Enrollment, by Sex, 1980-81 School Year—South Carolina State Department of Education, Office of Vocational Education, December 1981.

mile radius of Columbia there are three vocational centers which offer both machine shop and electricity courses. Eighty-eight students are enrolled in machine shops, three are females. Ninety-one are enrolled in electricity, two are female. Yet, girls represent 45 percent of all the students enrolled in these three vocational centers.[2] Where are the rest of them? Twenty-five percent are in clerical programs, 15 percent are in industrial sewing programs, 14 percent are in home economics programs, and 13 percent are studying to be cosmetologists.[3]

South Carolina is a State which claims to be taking a leadership posture with respect to preparing its citizens for the labor force of the future. It is trying to lure high technology to its community and boasts, at the post-secondary level, of a program which is preparing a highly skilled and well-trained labor force to meet the needs of industry.

Over the past several years companies such as Michelin, Cincinnati Millicron and United Technologies have set up plants in South Carolina. It will not be long before the Sony Corp. sets up a plant there as well. Where will the young women fit into these industries and jobs of the future? Will those who are totally unskilled as well as those with skills in industrial sewing and house and home furnishings will start at the assembly line, low wage rate positions with little room for skill development and advancement?

Some educators in the rural areas justify enrolling 25 young women every year in a cosmetology program by saying that is what the students want, even if their particular area cannot support five cosmetologists. Yet this justification perpetuates the difficulties they claim to have in increasing nontraditional enrollments. Most vocational students, particularly young women opt for programs that are familiar to them. They do not know about or choose courses in areas consistent with their capabilities and which provide the types of training which can lead to excellent employment opportunities. They choose to enroll in such courses as consumer and homemaking, industrial sewing and cosmetology, because they conceive them as women's programs and because they know what people in these jobs do. They do not know what machinists do, they do not know what industrial electricians do so they go into cosmetology programs.

While it is true that vocational centers do not prohibit young women from enrolling in traditionally male courses, which also happen to offer the most useful skills training, neither do they make a concerted effort to inform young women about the kind of things machinists, electricians, or industrial mechanics do, what working conditions they can expect in these jobs.

Many of the rural and economically disadvantaged young women I interviewed from South Carolina vocational schools are unaware of career options available to them outside of the traditional. They aspire not to the jobs which are most appealing based on wide comparisons and information; rather, they aspire to the jobs which they think they can get. This means that most young women there do not think beyond low paying entry level factory work.

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[2] Vocational Education School Enrollment, by Sex, 1980-81 School Year, published by the South Carolina State Department of Education, Office of Vocational Education, December 1981.

[3] Data from source indicated above. Remaining percent distributed among agriculture, distributive education and trades and industrial.

Sex equity statistics will not change notably until other changes occur. With respect to the purpose of this hearing and others related to vocational education, I submit the following recommendations:

An understanding about the world of work and the kinds of careers and training available is desperately needed by young women, especially those in rural areas and who are minority and economically disadvantaged. Funds in the form of Federal grants to provide this career counseling at an intensified level should be available not only to local education agencies which do not otherwise provide this counseling, but also to nonprofit community and civic organizations and agencies. LEA guidance counselors and vocational placement coordinators are not providing this service to an effective degree. Only 2 out of every 10 students I interviewed ever saw a guidance counselor for career counseling more than twice during her high school experience.

Continue funding the sex equity office for vocational education. The level of awareness about sex equity and its potential benefits to young women and men would not even have reached its current status were it not for this important function. Further, prescribe as a function of this office that the sex equity coordinator conduct outreach and liaison activities between local business/industry and persons involved in vocational education at both the State and local levels. At present, the link between these parties is quite weak.

Target Federal funds for vocational programs which produce the greatest number of graduates who are hired in their area of training. This is particularly important with respect to programs in high skill areas.

Strengthen vocational advisory councils at the local level by requiring that: (*a*) They meet on a regular basis, a minimum of four times a school year; (*b*) council members are trained and provided information which will enable them to clearly understand their role and responsibility; and (*c*) The State vocational advisory council conducts at least one training session per year for local councils.

Retain the vocational education data system, including the number and percent of students who are placed in and out of their field for each vocational program.

Continue funding categories for economically disadvantaged and displaced homemaker populations.

Provide incentive grants/funds for vocational centers to increase the number of cooperative programs which enable students to get on-the-job training.

Just as they now make up half of the student population in vocational training programs at the secondary level, women will soon comprise half the workers in this country. It is naive to expect that they will overcome generations of sex-biased socialization about their place in the labor force without help from educators, community leaders, business/industry representatives, and family members. These young women represent a wealth of potential; it is wasteful and counterproductive not to vigorously pursue the development of that talent.

Thank you.

Mr. **Erdahl**. Thank you very much.

The next person on our panel is Ms. Jo Shuchat, project director, Women's Outreach Project, Technical Education Research Centers, Cambridge, Mass.

STATEMENT OF JO SHUCHAT, PROJECT DIRECTOR, WOMEN'S OUTREACH PROJECT, TECHNICAL EDUCATION RESEARCH CENTERS, CAMBRIDGE, MASS.

Ms. **Shuchat**. Mr. Chairman, I am Jo Shuchat, and I am grateful for the opportunity to introduce my 12-year-old son to one of the ways in which we govern ourselves. I am also grateful for the opportunity to testify before you today. It looks like my job is going to be to tell you about the part of the cup that is half full.

I do not disagree with those of my colleagues who have been telling you about the problems. What they are saying in my view is correct. I would like to tell you about some of the progress, however, that we have made in terms of nontraditional occupations for women.

I would like to describe what NTO programs have accomplished at the local level; explain how, in my view, the sex equity provisions of the act made this happen; and present to you my recommendations for reauthorization. I will be giving you very few statistics in these comments, as other witnesses have provided them. Instead, I would like to tell you what NTO has meant to individual people; women, school staff, and employers. First, however, I want to tell you where my information comes from.

THE WOMEN'S OUTREACH PROJECT

The Women's Outreach Project was awarded to TERC, with Ellis Associates as the subcontractor, by the Office of Vocational and Adult Education under subpart 2, "Programs of National Significance," as an activity to overcome sex bias—sections 171 and 136, respectively. In our 2-year contract, we were asked to conduct research and publish a book for coordinators of NTO programs in post-secondary educational institutions, and another for women who are considering entering NTO training and careers.

These books have just been published and I have brought you a set if you would like to have them.

Mr. **Erdahl**. Thank you very much. We will include those in our record. Information for members and staff will be found in the files of the subcommittee.

[The books referred to aboved retained in subcommittee files.]

Ms. **Shuchat**. The NTO program can best be understood as a series of activities conducted by school personnel that enable women to take advantage of occupational training programs that normally serve men. It consists of activities such as recruitment targeted specifically to women, assistance with finding child care, methods for overcoming inadequate math skills, physical fitness training, support groups, role models, and preparation for tokenism problems on the job. Training, instructors, facilities, and standards are the same for women and men.

We discovered early on that there was very little printed information available on what works and what doesn't work in an NTO program. So we went to the source. We interviewed coordinators of 166 NTO programs across the country, 54 of them in schools, and asked them to tell us. We also interviewed 85 women who were about to complete their NTO training or were already working, and asked them to tell us what this career change meant to them.

We wrote this information up in draft versions of the books and field-tested them in new NTO programs at five schools: Altoona Area Voc-Tech School, Altoona, Pa.; Broward Community College, Fort Lauderdale, Fla.; Northern Essex Community College, Haverhill, Mass.; Trident Technical College, Charleston, S.C.; and Waukesha County Technical Institute, Pewaukee, Wis. Each school hired an NTO program coordinator, whose salary was paid by the Women's Outreach Project for the field test.

These five program coordinators enrolled a total of 372 women in NTO training—nearly four times the number we had hoped we would get on the basis of the initial interviews. The retention rate was excellent, and the coordinators tell me they expect excellent job placement results when the women complete their training.

In my written statement I have included a description of the field test programs as well as a summary of the interviews we initially conducted.

All five schools, independently and voluntarily, rehired their coordinators with inside funding to continue the NTO programs after Federal support ended. In a time of shrinking resources, I believe this development is the most eloquent testimony to the success and value of the NTO effort.

We revised the nuts and bolts of NTO and time for a change after the field test, and are now in the process of an intensive national dissemination effort. Interest in the books has been extremely high: we have received over 1,000 individual requests for them, primarily from school people but also from agencies, nonprofit organizations, researchers, and others. So one answer to the question of what the impact of the sex equity provisions of the Vocational Education Act has been is the rather remarkable success of the Women's Outreach Project.

IMPACT AT THE LOCAL LEVEL

In this part of my testimony, I would like to discuss the impact of the sex equity provisions in four different ways: benefits to schools, to employers, to NTO women, and to Government and the public.

BENEFITS TO SCHOOLS

In exchange for funding the NTO program coordinator job and providing operating expenses, schools obtain increased female enrollment in male intensive vocational programs. This increase does not come about as a result of raiding female intensive programs, but is rather a net gain. Publicity about the program in the local community produces matriculated students who would not otherwise have enrolled in school. The financial health of the school is therefore improved.

Another benefit is that lessons learned in the NTO program are often applied to other school services. For example, one of our field test sites discovered that the lack of public transportation was keeping many potential NTO women from enrolling. The solution that was devised is now being used to help all students without cars get to school. At another site, math assessment procedures developed to help NTO women are now in use schoolwide for all students.

Still another advantage of NTO programs cannot be quantified but is very real nevertheless. We have been told time and time again of the lift in faculty and staff morale that comes from participation in a program that makes a visible difference. An administrator told us:

> Our program got more publicity, acclaim, and recognition than any other program we have run in the past six years. I have seen counselors and instructors in Developmental Studies perk up: the program gave them so many more career options to offer women.

An instructor said: "This program was one of the highlights of my teaching career." I am giving you very typical comments.

BENEFITS TO EMPLOYERS

The most obvious benefit to employers is the satisfaction of affirmative action requirements, but I suspect this is a short-term view. More important in the long run is the fact that NTO women represent the largest source of currently untapped workers for critically labor-short occupations in technology and industry. Women tend to switch to NTO careers from homemaking or traditionally female jobs from age 25 to 45, so they are reliable and mature workers who have roots in the community. They also have an unusually strong motivation to succeed in their new careers, about which I will talk in a moment. This is cost effective for employers who are otherwise forced to cope with labor shortages by importing employees from out of State or raiding other companies for them. An adequate, skilled, and dependable work force means higher productivity and the ability to respond quickly to technological change.

Obviously, not all employers see women as contributing to these advantages. There are still many who believe women can't—and shouldn't—do "men's" work. But those who are able to see beyond the stereotypes recognize that employing women in nontraditional occupations is simply sound business practice. Employers of NTO women tell us this:

> The women I hired took almost no time to become productive. When I asked the department foreman how the women were working out, he said they rate higher than any other group of new employees we have had.

And another said, "I have to admit that the morale is better around there since the women came."

BENEFITS TO NTO WOMEN

More than any other single advantage, NTO women talk about the need to have enough money to live on and support their families on. They are under no illusions. The divorce rate is climbing; more and more women are realizing they are "one man away from welfare." Husbands often can't make ends meet in inflationary times, and single mothers can't support their children on the paychecks of traditionally female jobs. Women are getting married later and supporting themselves in the meantime. They are supporting themselves through more years of widowhood than ever before. Women simply need enough money to live on, and many traditionally female jobs don't give it to them.

Everyone in this room knows that the average women makes 59 percent of what an average man makes. Put another way, she has to work for 9 days to make the same amount of money he can earn in 5 days. Make no mistake about it: Women are interested in NTO for the money first, and for job satisfaction second. These are, of course, the same reasons why men work.

So when we talk about the impact of NTO on women, we talk about money. A woman who became a welder said, "I got into this for the money. The dentist doesn't give me a discount because I am a woman." An electronics servicing technician: "I never thought I could do men's work, but I needed money so bad I did it. And I am so glad I did." An avionics technician: "I went into this for the money--I've got kids to support—but you can't put a price on what I've got."

NTO women find another benefit beyond money, often much to their surprise. It is best expressed by a woman who became a truck driver in her mid-30's:

> I'm not a feminist, but I'm as capable on the job as any guy, so I deserve it as much as he does. I'm much more independent now, and since I'm divorced that's important. It feels so good to know that I don't need to rely on anyone to support me and my kids. I feel like I'm somebody now, like I'm good for something. I have a lot to look forward to, and I don't mean money, either, although I'll have plenty of that. I mean self-respect.

I would like to emphasize that the NTO women we reached in our project turned to NTO as a resource in time of need. They were working because they had to. They became welders and technicians because these jobs pay better than secretary or social worker jobs, not because it was the ideologically correct thing to do. Given their financial need, and the fact that they did not have and could not realistically get advanced educations to become lawyers or corporate managers, these skilled and technical occupations were their best hope of making decent lives for themselves and their families. In short, they were responding to reality, not to theories or statistics about women's place in the work force.

BENEFITS TO GOVERNMENT AND THE PUBLIC

I have already mentioned the advantages of higher productivity and the ability to respond to technological change in a national and world market, which an adequate and appropriately skilled work force makes possible. To the extent that the traditional supply of new workers for skilled and technical jobs is decreasing—witness the shrinking high school population, for example—training and hiring women for these jobs strengthens the economy.

NTO women make more money than women in traditionally female jobs, by and large. This means that they depend less on governmental assistance for the working and nonworking poor. They pay more in taxes. They spend more in local businesses. A woman who becomes financially secure by means of a good NTO paycheck helps herself and reduces our responsibility for her. And in these days of shrinking resources, that is an attractive benefit indeed.

THE ROLE OF THE SEX EQUITY PROVISIONS

I have no doubt that these benefits occurred because of the existence of the sex equity provisions of the Vocational Education Act. These provisions are responsible for the NTO programs I have been describing in two ways: Focusing awareness on the need for NTO and providing funds to meet it.

The provisions that focus awareness on the need for NTO have been especially important. Traditional patterns of education and employment tend to be perpetuated because of the power of the status quo. Inertia carries everyone along, so they do today what they did yesterday. NTO, however, means that people have to rethink assumptions and ways of doing things. It tends not to happen unless the law says yes, NTO means some changes, but the changes are advantageous. In my work, I have found that the chief obstacle to NTO progress is usually the enormous but often invisible power of the status quo, not direct and principled opposition.

Section 120, "Authorization of Grants and Uses of Funds," is therefore of great help in overcoming the status quo by pointing out that funds are to be used for "women who are now in jobs which have been traditionally considered jobs for females and who wish to seek employment in job areas which have not been traditionally considered job areas for females . . ."

The second aspect of focusing awareness on the need for NTO is the existence of a sex equity coordinator in each State. I have met most of them over the past 2 years, and they are doing an indispensable job. In their role as teachers, resource identifiers, encouragers, network facilitators, and catalysts for school people in their States, they have been the critical element in NTO progress. Because of the power of the status quo, sex equity coordinators are able to provide the initial small push that is often needed to establish an NTO program in a school. They are an invaluable, important, and extremely cost-effective group.

Awareness is essential, but money is important, too. Most of the 54 school-based NTO programs we interviewed 2 years ago told us they were funded with Federal vocational education money, and many specifically identified "grants to overcome sex bias in the Vocational Education Act." Certainly, our five field test NTO programs would not be in operation today without having been started with this money. Across the country, small grants are being used as levers to fund components of NTO programs that would not exist otherwise. RFP's for NTO are being written and responded to across the country because the money is available for this purpose and because the sex equity coordinators are there to insure that it is used this way. In a number of States, vocational education money is being reinforced by CETA funds to implement NTO programs; our field test site in Altoona, Pa. was one of these.

I believe the sex equity provisions of the 1976 Vocational Education Act are directly responsible for most of the progress on the NTO front that has been made in vocational education in the last 5 years. They have enabled thousands of women to become economically self-sufficient, many for the first time in their lives.

RECOMMENDATIONS FOR REAUTHORIZATION

My overall recommendation is to retain the sex equity provisions in the reauthorized Vocational Education Act. Sex equity in general, and NTO in particular, rarely happen by themselves. They need the kind of push that the provisions give to help women, educators, and employers realize that NTO, while unfamiliar and new to many, nevertheless brings them substantial benefits.

I recommend that you retain the set-aside for full-time sex equity coordinators in each State, and continue to mandate their functions. Because I believe that the chief obstacle to NTO progress is the force of the status quo, it is essential to have personnel in place whose job it is to point out the advantages of change and to provide the funds needed to accomplish it. The sex equity coordinators are the most effective mechanism we have to effect this kind of change, and they cannot do it without adequate support from you in Washington.

Finally, I suggest that you increase if possible, or at a minimum maintain, the funds reserve for sex equity functions, including sex equity coordinators and grants to States to reduce sex bias, sex stereotyping, and sex discrimination in vocational education. I hope I have been clear in pointing out that nontraditional occupations for women is economically a smart thing to do. To the extent that we can provide more funds to encourage NTO programs and to train women in NTO jobs, we will be contributing to higher productivity for the technology-related and industrial segments of our economy, supporting Government through taxes paid from higher NTO incomes, and reserving public assistance funds for those who cannot manage without Government help. I think it is a very good return on our investment.

Thank you very much.

[Material submitted by Jo Shuchat follows:]

THE WOMEN'S OUTREACH PROJECT

Summary of interviews conducted with the coordinators of nontraditional occupations (NTO) programs for women, November 1979-February 1980. Programs were found in all states but one.

SPONSORING ORGANIZATIONS

	Number	Percent of total
Nonprofit organizations	63	38.0
Education institutions [1]	54	32.5
Unions	20	12.0
Business and industry	13	7.8
Government, all levels	13	7.8
Joint industry and union	2	1.2
Joint vocational education [1] and union	1	.6
Total	166	[2] 99.9

[1] Public postsecondary educational institutions offering vocational programs at the sub-baccalaureate level

[2] Due to rounding

FUNDING SOURCES

	Single source		Partial source	
	Number	Percent of 166	Number	Percent of 166
CETA	70	42.2	19	11.4
Vocational education [1]	27	16.2	16	9.6
DOL	17	10.2	1	.6
Industry	10	6.0	5	3.0
Union	3	1.8	3	1.8
Government, Federal	1	.6		
Government, State	6	3.6	1	.6
Government, county	2	1.2	1	.6
Government, local	2	1.2	2	1.2
Foundation			4	2.4
College	1	.6	1	.6
Other	1	.6	2	1.2
Total	140	84.3		

[1] Public postsecondary educational institutions offering vocational programs at the sub-baccalaureate level.

FUNDING OF NTO PROGRAMS AT EDUCATIONAL INSTITUTIONS

	Number	Percent of 54
Vocational education funds only	26	48.1
CETA funds only	12	22.2
Joint vocational education and CETA funds	7	13.0
Joint vocational education and other funds	3	5.6
Other nonvocational education funds	6	11.1
Total	54	100.0

APPENDIX A.—DESCRIPTION OF THE FIELD TEST NTO PROGRAMS

Altoona Area Vocational-Technical School, 1500 4th Avenue, Altoona, Pennsylvania 16603, 814/946-8455, Robert Walker, Site Director, Edith Walker, Administrative Director

This school provides vocational education to high school students and adults. Altoona's was the only field test program to be supported by CETA funds, and it began a little earlier and ended a little later than our formal field test. Staff consisted of the site director, five instructors for the exploratory phase, and one counselor. One hundred women were screened, 60 were selected for training, 44 completed the program, and 18 were placed in NTO jobs within 3 months in an area with a 12 percent unemployment rate. Stipends were paid to trainees. Personal counseling was provided throughout the program.

Phase I, 5 weeks: The exploratory period, with women spending a week in the shops and labs of each of five broad occupational clusters.

Phase II, 1 month: Occupational counseling, refresher math, blueprint reading, physical fitness, and women's issues.

Phase III, 4 months: Intensive training in each woman's chosen occupational area, with continued occupational and personal counseling.

Phase IV, 2 weeks: Observation and participation in local industry.

Phase V, 3½ months: Intensive occupational training, followed by placement.

the CETA prime sponsor has refunded the program for another cycle. The Altoona Women's Outreach Project has been selected by the State of Pennsylvania and the Region III Office of the U.S. Department of Education as the best in their respective areas to prepare women for nontraditional employment. the program is one of three nationally nominated for the U.S. Secretary of Education Award of Recognition as an exemplary vocational program, the only women's program to be nominated.

Broward Community College, 225 East Las Olas Boulevard, Fort Lauderdale, Florida 33301, 305/475-6500, Leslie Delman, Site Director

This school has three campuses and a fourth administrative building located throughout the county, making logistics for the schoolwide NTO program a challenge. The program concentrated on enrolling women in electronics, computers, engineering, aviation, and transportation, since these were identified as male-intensive and leading to high-demand jobs as determined by a preliminary job market survey conducted by the site director.

One focus of the program was on-campus enrollment. The site director used publicity aggressively: newspaper, radio, television, and frequent speaking engagements. She organized a five-part career exploration workshop, where four sessions were conducted by instructors and role models in the evening's occupational area, and the fifth was on women's issues in relation to nontraditional employment. Over 150 women signed up for the non-credit course, making it the most popular ever sponsored by BC's Women's Centers. Using these methods and extensive individual counseling by the site director, 160 women enrolled in NTO training. Support services on math anxiety, stress, and assertiveness were available through the Women's Centers. The site director worked with instructors individually to create awareness of women's instructional needs. The NTO program is now integrated into the Women's Center services on each of the campuses.

The other focus was arranging upgrading courses with local employers for current employees in low-level jobs, most of whom were women. Targeting companies with a shortage of skilled technical workers, the site director organized company-paid electronics and data processing courses with four employers. The courses were taught by BCC instructors at the companies. In doing so, she pioneered an innovation: bringing the registration process to the company rather than the more traditional method of bringing the students to the registration office. Sixty women enrolled in these upgrading courses.

Northern Essex Community College, 100 Elliott Street, Haverhill, Massachusetts 01830, 617/374-0721, Mary Jane Gillespie, Site Director

Much of the effort of this field test program was directed toward increasing women's awareness of nontraditional occupation options, with a focus on careers in electronics and computers to meet the labor needs of the numerous high technology companies in the area. The site director organized panels of role models, industry tours, open house events, and an eight-session non-credit course on technical careers and technical writing. Much use was made of print media, including newspapers and an illustrated newsletter written by the site director. The NTO programs enrolled 39 women in electronics and computer occupational programs.

The site director conducted an informational workshop for faculty and staff early in the field test, and out of this workshop came the impetus for an on-campus coordinating committee, chaired by the site director, with counselors, instructors, and administrators as members. Meeting bi-weekly, the committee identified math as one area greatly in need of attention. This committee enabled a cross-section of faculty and staff from different areas in the college to meet regularly to discuss problems and to brainstorm solutions, workshop topics, funding sources, and resources.

Trident Technical College, P.O. Box 10367, Charleston, South Carolina 29411, 803/572-6111, Susan Duchon, Site Director

The only field test site to have a previous NTO program, Trident Tech focused on black women, since they had not been successfully reached before. Early on, the site director identified a lack of transportation as a major barrier. Most of the women lived in downtown Charleston or in outlying rural areas, while the NTO programs were located at a campus several miles away. Few women had cars, and public transportation was inadequate. Past attempts had been made to remedy the situation, but the problem seemed insurmountable. The site director repeatedly raised the issue with upper-level administrators and gathered support from other staff members. With the commitment of the school's president, the transportation problem has now been solved by means of a shuttle bus.

Another major problem was that women, frequently "bottlenecked" in developmental studies courses, rarely considered NTO as an option. Some of the traditionally female programs they were preparing for had stringent entry requirements and others had a limited number of openings. The site director eased the problem by improving communication and coordination between the downtown campus developmental studies program and NTO instructors at the North campus.

The program concentrated on in-house recruiting, using presentations to developmental studies classes, a widely publicized Technology Discovery Week, role model panels, and hands-on tryouts. Additionally, an active support group was set up for the potential and enrolled NTO women.

Thirty-one black women enrolled in NTO training in industrial and engineering technology, an increase of 86 percent over the previous year.

Waukesha County Technical Institute, 800 Main Street, Pewaukee, Wisconsin 53072, 414/548-5578, Judy A. Trombley, Site Director

The Women's Development Center at this school had been focusing on NTO for several years before the field test program began, but staff members were not satisfied with the results. "Think Non-Traditional" (TNT) targeted occupations which the site director had identified as labor-short in her labor market survey at the beginning of the program. The program featured several series of exploratory workshops, which included role model panels, hands-on tryouts, and industry tours. Registration for the non-credit course was limited to 22 to ensure a close, supportive atmosphere for the women. At the conclusion of the series, the site director held individual exit interviews to provide occupational counseling and arrange for needed support services.

Extensive support services were provided: a support group, counseling, workshops, and improved coordination with the developmental studies department. A notable aspect of this program was the full participation and cooperation of instructors, academic and occupational counselors, and other staff, which the site director achieved informally through frequent meetings and coversations.

Thirty-two women, out of the 85 who took the TNT courses, enrolled in drafting, electronics, office equipment repair, and appliance servicing. Four other women were placed in NTO jobs, and two others were accepted for apprenticeships.

Mr. ERDAHL. Thank you very much for an excellent statement. I want to make that same comment to each and every one of you. I think we have had some very fine papers and statements submitted today. I don't think you went through an official coordination of your statements before you gave them for the record—you nod your heads in the negative—and yet I think in many instances they complemented one another and reinforced positions made by various members of the panel.

As I mentioned a moment ago perhaps some of you have some questions or reaction to your colleagues on the panel and if you wish to proceed with some of those at this time I would be receptive to listening to them.

Please, for my benefit and for our recorder, would you identify yourselves for our record.

Ms. SCHINK. I would like to amplify one of her comments that had to do with using the $50,000 set-aside as a springboard for other program activities. In Pennsylvania this has been our experience, that when the $50,000 set-aside was used for establishing the office of sex equity, it allowed them to then, through imaginative use of those funds, to expand the areas where they were operating and to use that as a springboard for other kinds of programs and to expand the whole perception about sex equity. Actually, in Pennsylvania, outside of the vocational education, into the whole, entire State board of education, into the goals of sex equity for education as a whole so that it had an opportunity to more than adequately use the money for vocational education by itself.

Mr. ERDAHL. Has anyone else a question or reaction?

Maybe some will come up as we go along. I will start off by asking some rather general questions and then maybe ask some individuals some more specific ones.

I think all of you seem to emphasize that the Federal Government is playing a key role in this whole area of sex equity, it has in the past and probably needs to in the future. This would seem to counter the present administration's stress on shifting this and other programs into State block grants.

Do any of you care to comment on that?

Ms. WELLS. I guess one point I wanted to stress in my testimony was that we feel that unless the Federal Government keeps up this initiative that we will see a regression in the States. Even though we felt the 1986 amendments were very strong law when we started out with implementation in 1977, we have seen that States really have not utilized the funds that were available for sex equity to a great extent.

The progress we have seen has occurred only in those areas where the money was used and we found such things as the State planning process, for example, it has not worked very well in those States to get States to give local education agencies incentives to encourage nontraditional enrollment. We just feel it is really critical to maintain that Federal role, to maintain Federal funding that is specifically set aside to provide some of the kinds of services that Jo Shuchat has described.

Generally by and large the money is just not being provided. Less than 1 percent of the Federal funds have been used for these kinds of programs which are so incredibly effective where they are implemented.

Ms. WATSON. At the secondary level, in South Carolina in particular, they have already cut the $30,000 that they have been setting aside for sex bias activities. It took the vocational centers 3 years to respond to these grants that were offered.

The sex equity coordinator finally got to the point where she had all of the money applied for and used and then it was cut, so that there is no more sex bias money at the secondary level in South Carolina, and unfortunately in one particular rural county which was doing a lot of good work, not only for students but in the community and for business and industry, using this money, they now no longer have that incentive to perform that activity and it is really sorely needed, not only at the secondary level but particularly in the rural areas.

Mr. ERDAHL. If I could follow up on that. I think that Ms. Looney shared with us that in the State of Georgia, and it evidently is not peculiar to the South or peculiar to Georgia, they have not seemed to be very responsive and my question would be: What activities have you and others in this group that you might know of done as far as contacting State education administrators, the Governor's offices, State legislators, this kind of thing? Maybe I could direct that to you, Ms. Looney.

I assume if you have been here in Washington you have also talked to your legislature in Georgia, or someone representing your group.

Ms. LOONEY. Our strategy has changed over the 3 years. When I first started I was working part time and realized that to try to influence systems in the State was very difficult, so what I tried to do then was to influence the State department of education and try to get them to enforce the provisions of the law.

One of the tactics we used was trying to get the Federal Government to come in and say, "You need to do more." However, since the administrations have changed we have shifted our focus and now have been going to local school systems talking with teachers, administrators, employers and trying to do locally what we had been doing before on a statewide level.

I do think you are right about the State legislature. If sex equity is not a mandatory provision of the law, it does not really matter what the State department of education wants to do and how supportive they are of the issue, because when it gets to the State legislature they have never been supportive of women's issues, and they would eliminate that very quickly.

Mr. ERDAHL. Any other comments?

Ms. SCHINK. Our experience at the State level has been quite different. Partly because Pennsylvania has had a longstanding very forward notion on womens issues and sex equity, having been fully ratified and implemented the equal rights amendment at the State level. There has been a lot of momentum toward sex equity at the State level.

I think we have to point out, and everyone else has said the same thing in large measure, the success of sex equity programs is the result of strong commitments on the part of individuals at whatever level. That a strong commitment at the Federal level is an incentive for States to also initiate activity at the State level and that the States by themselves with a strong State level commitment can then in fact translate that into positive motion within the local school district.

The implementation efforts are still the responsibility of the local school districts, but lacking a positive commitment from Federal and State legislative bodies, it is very difficult for local school districts to develop materials and programs and initiatives on their own.

Mr. ERDAHL. Has anyone else a reaction to that?

Let me explore another area for some response: Programs.

We have had several hearings dealing with this same area. It came up yesterday and again today. It seems to me one of the voids or areas in which much more has to be done is in the area of counseling and guidance. It seems like people are not aware of opportunities and options that are there.

If I could pick any one area—I am not trying to pick on some people in this panel or in the audience who might be involved specifically in vocational counseling or guidance—but this seems to be the area in which we have fallen down, frankly. Do any of you wish to comment on that area or need, or disagree with me if you wish?

Ms. WATSON. In all the discussions I have had with students, teachers, at the academic high schools and in business and industry, I feel very sorry for guidance counselors because they are really being dumped on. Everybody says the guidance counselors are not doing the job and I think the problem is they have not only one job to do.

Students are not seeing guidance counselors for career counseling unless they take the initiative to go into a counselor and say; "I need to discuss with you what my career is going to be like."

I think that is a very important thing that has to happen. Business and industry agrees with it, teachers agree with it. Everybody dumps on the guidance counselors but nobody suggests how those people who are wearing several different hats are going to meet that need, particularly on an individual level.

Mr. **Erdahl**. In other words, you are saying maybe it is the parents, maybe it is business and industry themselves trying to get more linkage between jobs and training; maybe it is the other classroom teachers. Maybe we have to look at the junior high and the grade school levels—staff at these levels should be directing the students to the guidance people.

Ms. **Watson**. The young women particularly in rural areas, economically disadvantaged, do not have for the most part role models. Their parents—they aspire pretty much to what their parents are doing. Their parents are working in factories.

When I would ask most of the students I asked what kind of job they wanted to have, I would have to ask them to think about a job they would dream about. Not one that they knew they might be able to do, so they are not getting any information from anywhere about what is available and what industry needs and industry—one industrial person told me he felt the guidance counselors in his particular school district were totally incompetent, that they were retired military people who had no business being guidance counselors, and these kids were just not getting what they needed.

They do not even know what higher technology and industry will look like 5 years down the road. They have no notion of it at all, and it has to be provided somewhere, or else we will continue going along at the same rate.

Mr. **Erdahl**. I think we are all aware that our young people, children, students, often rise to the level of our expectancy.

Ms. **Shuchat**. I would like to respond from the point of view of the adult student which was the population I was working with. There is no doubt about the fact that guidance and counseling is critical. Again, I come back to my notion of the status quo. If you do not mess around with the status quo, you get the same results you always got. That really is another way of saying guidance and counseling.

There must be someone whose job it is to say to students, "There is another class of occupations that you have never thought of, and there are their advantages and their disadvantages, and there is what they involve."

That really is the job of the guidance counselor, or very often we find in NTO programs, that is very often the job of the NAO coordinator, because guidance counselors do not have that information, or do not give it to women. Once women have this information, they can then act on it as I have been describing to you, but the guidance and counseling function is critical.

I honestly care much less about who does it, whether it be a formal guidance counselor, than that it get done.

Ms. **Schink**. I think one of the things, too, is that there is a vast difference between our traditional perception of the role of the guidance counselor, and this whole emerging area that we are talking about that really is career awareness. That those two are not necessarily one and the same, and that this career awareness seems to be the real void in the education of many young people, not just girls, but the acute lack of experience and knowledge for young women and girls is particularly acute.

It appeared in our local school districts, those that we were monitoring, that requirement for giving that information at a younger and younger age seems to be consistent across the board.

That sometimes by waiting until the children are in high school, that it is too late, that they may have closed off math and physics options for themselves, that they should be made aware of that at a younger age.

Mr. **ERDAHL**. This came up in a hearing we had here yesterday, and I have thought of the same thing, that maybe through families, parents, our society, people are stereotyped I think at a very young age. I think it starts frankly before they get to school, where certain things are passed on.

Another question I have: Is business and industry receptive to placing women in jobs which traditionally have been characterized as "men's jobs"?

Ms. **SHUCHAT**. I think you have to watch out for generalizations. I am going to make some. Do not take me literally in every particular.

What we have found is that by and large the pattern is the more macho the occupation, the tougher it is for women and the more they are resisted. So when you talk about the skill trades for example that have a very clubby kind of atmosphere among the men with a strong feeling of brotherhood and history that goes way back and one that requires a great deal of physical—well, none these days require an enormous amount of physical strength because of technology change, but more strength than others, that is when you tend to get acceptance problems from employers and from coworkers.

I would like to emphasize, not always, that does not happen to all women, it certainly is not true of all employers and all coworkers. To the extent you can get into male-intensive occupations that are less macho, you have fewer problems. There is one of the very great attractions of high technology, now. They have less history, they are newer, they are clean, they are easy, and there are fewer sex associations.

Mr. **ERDAHL**. What you are saying is that it is probably easier for a woman to get into a job involving a computer than laying concrete blocks or something?

Ms. **SHUCHAT**. It tends by and large to be easier to get accepted into the computer jobs. Of course in some areas of the country you can make an awful lot more money laying concrete blocks.

Ms. **LOONEY**. One of the things we did when we talked with people about the competitive education problems is, we asked the instructors: Are employers asking you for students of a particular race or sex? And they said it still was happening sometimes, but that it rarely happened and it was happening a lot less now than it used to be.

What we found was that even though they were not requesting it as often as they had in the past, teachers were still assuming that they wanted it. For instance, in vocational office training, in the business education class, the VOT teachers would assume they wanted a white girl because that is always who had taken the class in the past, so it was not necessary for them to say, "Please send me a white girl to be a receptionist" because they knew that is who they would get.

When we asked employers if they still had jobs that only one sex worked at, they still did in some instances. They said—some of them said they were willing to hire, you know, the other sex for the jobs, and others were not. So some of it is still going on, that they are not willing to make the change.

And they use mainly the reason about weight. Like stock clerks. A girl cannot be a stock clerk because she cannot lift heavy boxes. They have not reached the point where they can realize that there are individual girls and women who could lift boxes.

Ms. WATSON. What I have found particularly in middle and high technology industry is that if a woman—for instance, the machine shop I referred to in my testimony, I am sure all three of those females coming out of that machine shop with the reputation that instructor has would be employed immediately.

As far as tool and die makers and really highly skilled workers, industry seems to not care. They need these workers so badly that they claim that they will hire women just as quickly as men. In fact, one industrial employer insisted I tour his factory and pointed out every single woman, and they were representing all levels of technology in that particular industry.

Mr. ERDAHL. If I could follow up on a question—I will direct this to you, Ms. Watson, and to all of you as well, but you brought this to my attention.

Given statistics which indicate that not very many women are enrolled in traditional men's classes, and that not very many men are enrolled in traditional women's classes—how can that be explained?

Ms. WATSON. Well, I think that the counseling thing is really one of the key areas. The women do not know what machinists do.

The elders will tell you it is because women do not want to get their hands dirty and I resent that explanation because I think women have been getting their hands dirty for a long time.

I really believe that these young women—they know what cosmetologists do, they know what consumer and home planning means. They do not know what a lathe operator is. They do not even know what a lathe looks like. And that type of technology is the technology not only of the future, but pretty much of the here and now, and they do not know what those kinds of jobs are, what the work force is, what it means.

For that matter, those going into industrial sewing, a number of them have never been in an industrial sewing factory either, but their mothers work in a factory or their sister works in a factory, someone in their family or there are factories in their neighborhood, that that is what they aspire to. They have no real knowledge and I am talking particularly about young women who are in rural areas. In the urban areas, they are a little more sophisticated, but they do not lay the knowledge to get into those programs.

Mr. ERDAHL. I am not sure our goal should be that we should have the traditional homemaker classes being 50-percent male, 50-percent female or the shop or the electrician class. I believe our goal should be to provide a complete and open option for the individual with the best information to make a choice for him or herself.

It seems the thing is to allow a choice. We might have people who are female, black or poor or are living in a certain area that would not have those options, do not have those choices. Then we think for that person there is not equity, there is not freedom. Maybe that sounds overly idealistic, but I think that should be the goal.

If the person wishes to be a homemaker or wishes to be a secretary, wonderful, well and good. But if she wishes to be a welder, or a bricklayer or an airline pilot, she should have the option, if she has ability to do these things, to pursue that goal.

Ms. WATSON. If I may respond, I do not think we can make judgments about a young girl's decision to work in a factory. I think that is her choice and I do not mean to be derogatory about that.

Mr. ERDAHL. I did not take it that way at all.

Ms. WATSON. She is choosing that because she does it out of ignorance, out of not knowing what else is available to her, and that is where the difficulty comes in. They should make the decision to be a factory worker, knowing what other options are available to them.

Mr. ERDAHL. Anybody else? Yes, go ahead.

Ms. SCHINK. I think we would all agree that the goal of equity achieved by choice of each individual student is an admirable goal. But I think that through our research project, working with State and local groups, that we have found that without active recruitment, active programs to make the economic consequences of these choices plain to young women, that this equity option is not going to be exercised.

Mr. ERDAHL. Yes, go ahead, Ms. Shuchat.

Ms. SHUCHAT. If I could respond to that very quickly. You are right about the goal being free choice and a good option. I would maintain, however, that if you are ignorant about one-half of the possibilities, you cannot be considered to choose freely. And it is not just ignorance that we are concerned about.

Janet brought up the issue of transportation, which we have run into very often; the issue of child care; the issue of enough money to go to school.

If a woman is sexually harassed out of a classroom because she is a woman, that cannot be considered a free choice. It is as if we were saying in some of these cases, we are going to have a race, and we are going to pick the marathon winner against the neighborhood jogger, and it will be an absolute fair race. We may as well not kid ourselves.

Mr. ERDAHL. I don't disagree with you at all. I think that is the key point that we should be aware of. That we should try to remove these barriers, so people actually do have a full range of choices. Obviously, if a woman does not, is not aware of options she might have, or if because of stereotypes, because of lack of funds, like you said, harassment, inability to leave the children to get to training or a job, certainly this person does not have the same access.

So I think that is a very important one.

Ms. Wells, you stressed in your statement something that I think was touched on by everybody—this whole area of feminine poverty. As we look at poverty in our country, and I think your statistics and emphasis underscored it well, much of this poverty is either centered in women that might be single heads of households, and in their children.

I think you made this point—I don't have your opening statement in front of me now, but many of the poor children in this country are members of a family headed by a woman.

Ms. **Wells**. I think some 10 million children, in fact. A very substantial number.

Mr. **Erdahl**. It was startling to me. This the figure I recall. It was very startling to think of it, given the population in this country.

Ms. **Wells**. We had some data in my statement that I don't think I read. But almost one female-headed family in three in this country is in poverty. The median income in 1977 of families that were headed by single mothers was only $340 above the poverty level. That was the median income.

It was even lower for black and Hispanic female heads of households. The National Advisory Council on Economic Opportunity, which was one of the groups which really had published a number of things about the feminization of poverty, had pointed out that the decline of poverty in the past decade in the United States has been almost entirely among men and male-headed households.

Women, in fact, have become increasingly poor. They found the gap was even wider among young men and women than among older persons.

Mr. **Erdahl**. I don't mean to make it sound trite or cynical, but it seems to me that the main problem that poor people have is that they don't have enough money. We talk about all of the other problems that most of us with secure, well-paying jobs aren't even aware of nor can fully understand.

It seems to me that the Government cannot ignore the money issue. In the present situation today, the rest of society cannot ignore, the business and industrial world cannot ignore, the need for vocational assistance, including the more traditional academic education, which prepare people for opportunities. Because I think vocational assistance may lead to a job which in turn would permit a person to buy a car. Such a person would not have transportation problems.

A lot of things open up. Certainly, one of the questions that opens the door to more adequate funds to take care of yourself and your family is through preparation, training for a job that pays better.

I think that, again, Ms. Shuchat, you have stressed that area.

Ms. **Shuchat**. Yes.

Mr. **Erdahl**. And this whole idea of nontraditional occupations, their main attraction is not necessarily becauses they are often a more exciting or more fulfilling, but rather, I think you said that they pay better.

Ms. **Shuchat**. It could not be simpler.

Ms. **Wells**. I think in the CETA program and in the youth programs we have made a start at dealing with the question of youth unemployment. Those programs, of course, have been cut back now. That is very unfortunate. But I don't think we have made such a good start on dealing with the problems of women.

Our CETA programs, Job Corps, I think women still constitute only about a third of the participants in Job Corps. We haven't made a very good start at recognizing that women are poor for different reasons than men. That you have to provide child care, you have to look at the transportation problem, which is more acute for women.

You have to recognize that sex discrimination is a major problem that they are going to come up against, and provide them with supportive counseling and job placement services to help them overcome that.

We really have to think about these differences and institute them into the system. We feel that the Federal Government can help in doing this by putting out earmarked funds saying for the State to, you know, money that can only be spent to deal with some of these problems that are not being adequately met, by and large, in most of the States.

Mr. **ERDAHL**. Does anyone else have something to add before we adjourn our meeting today? I think another thing that you have emphasized, and I guess I am repeating it, is as we look at the Federal Government's participation in this whole process, dollar-wise as very insignificant when the whole budget is considered.

But it seems to me that the Federal funds are important and that we don't back off of this commitment, because here we have seen a system that works.

I think all of you have told us today and have told my colleagues and me similar things in past meetings, that as the Federal Government has given the emphasis, the incentive, some funding, the States have responded. Where it hasn't existed, we have had at least in some cases, not in all, a rather discouraging lack of response.

Again, to emphasize what may be one or several of you said, it seems like these Federal dollars have been invested in cost-effective programs. That is the big business word around here today, if we get something back for what we spend. We spend, of course, billions of dollars in the Federal Government.

But I think of the money we spend, if we spend some of it wisely on education, it represents the best investment society can make. It is a humanitarian investment, enabling people to live fuller lives with self-respect and satisfaction.

But also, I think it is an investment that over the long pull pays financial dividends, taxes, and all the rest. I think some of you have stressed that today. So I want to thank all of you, each one of you, for I think what was excellent testimony today.

And I will try to do everything I can to see that my colleagues and their staffs are aware of what you have shared with us today, and the meeting stands adjourned. Thank you very much.

[Whereupon, at 11:10 a.m., the subcommittee was adjourned.]

[Material submitted for the record follows:]

U.S. DEPARTMENT OF EDUCATION,
OFFICE OF THE ASSISTANT SECRETARY
FOR LEGISLATION AND PUBLIC AFFAIRS,
Washington, D.C., January 11, 1982.

Hon. CARL D. PERKINS,
Chairman, Subcommittee on Elementary, Secondary, and Vocational Education, Committee on Education and Labor, House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: This is in response to your request that the Department of Education submit a statement for the record regarding sex equity and vocational education, the subject of your subcommittee hearings on December 16 and 17, 1981.

The Department is pleased to comply with your request. Enclosed is the statement of Dr. Robert L. Worthington, Assistant Secretary for Vocational and Adult Education, in addition to appendixes detailing (1) stereotyping provisions; (2) programs of national significance; and (3) State summaries.

If the Office of Legislation and Public Affairs can be of further assistance, please let me know.

Sincerely,

ANNE GRAHAM,
Assistant Secretary,
Legislation and Public Affairs.

Enclosure:

WRITTEN STATEMENT OF ROBERT M. WORTHINGTON, ASSISTANT SECRETARY FOR VOCATIONAL AND ADULT EDUCATION

Mr. Chairman and members of the subcommittee, I am pleased to submit, for the record, this written statement on sex equity and vocational education.

In coming to recognize the inequities inherent in sex discrimination, the Federal Government, States and localities have worked hard—and progressed significantly in the last decade—toward eliminating or reversing the effects of sex discrimination from the schools.

VOCATIONAL EDUCATION SEX EQUITY OBJECTIVES

Vocational education is the link between school and the world of work. Sex equity initiatives are a relatively new aspect of vocational education. As a result of societal concerns independent efforts in this area had already begun in education, business and industry.

State sex equity coordinators, along with school administrators and faculty, students, parents, employees, and advocacy groups are working jointly to remove sex-biased barriers and are promoting full participation of males and females in all vocational education programs.

A study by the Sex Equity Coordinators and the Vocational Education Equity Council (VEEC), a professional organization in the Administration Division of the American Vocational Association, determined the sex equity objectives of vocational education to be:

To promote institutional policies which encourage males and females to acquire skills in nontraditional areas;

To provide outreach programs to recruit and counsel males and females to enter nontraditional areas;

To provide programs for target groups such as displaced homemakers, single heads of households, pregnant teenagers and older adults;

To provide staff development activities, such as workshops and conferences, so that administrators, counselors and teachers can serve students in nontraditional programs;

To provide retraining for vocational education staff so they can provide role models in occupations nontraditional to their sex;

To provide resources, such as model programs, "non-sexist" curricula, non-biased career counseling techniques and recruitment procedures targeted for special groups;

To provide increased communication and cooperation among educational agencies, business, labor unions and community agencies;

To increase the awareness of educators and the community of the opportunities offered by vocational education.

POPULATION TO BE SERVED

Sex equity efforts in vocational education expanded as the composition of the workforce changed to include more women. Over the past decade, more women have entered the workforce out of economic need, and more women are single heads of households. About half of all women are in the paid labor force.

Women accounted for more than 75 percent of the increase in the nation's labor force from 1980–81. This increase of female employees was 1.1 million according to the Bureau of Labor Statistics. About 60 percent were single, widowed, separated, divorced, or married to husbands whose earnings were less than $10,000 a year in 1979. In 1979, women who worked year-round, on a full-time basis, contributed 38 percent to their family income.

As female entry into the workforce has expanded, some groups are concerned about what has been called "the feminization of poverty." Today, 43 percent of families in poverty (set at $8,414 per year for a family of four) are maintained by some three million women. Sixty percent of children who live in poor families are in families maintained by women. Economic self-sufficiency for women and upward mobility depend on equal access under the law and improved opportunity to prepare for higher paying jobs.

In addition, changes in the traditional household have changed the needs of workers. The average American family is no longer the traditional nuclear family composed of a working father, full-time homemaker mother and two children. Only one in seven families conforms to this profile. In six out of ten families, both husband and wife work. In the last decade, the number of households headed by women has increased from one in ten to one in seven. Fifty-three percent of all mothers with children under 18 years of age were in the labor force in 1978. Better child care facilities, both at work and outside, have increased as women have gone to work.

In 1976 the Department of Labor estimated that there were four million displaced homemakers in the country. Displaced homemakers are persons who must seek employment because their marriages terminated through widowhood, separation or divorce. To facilitate their transition to the work force, vocational education programs in every State provide job readiness programs, job development programs regarding opportunities in the labor market, and placement services for graduates of programs for displaced homemakers and single heads of households.

LEGISLATIVE BACKGROUND

The Vocational Education Act as amended by the Education Amendments of 1976 (P.L. 94–482) marks the first time that Federal vocational education legislation has specifically addressed equal access for women and girls to all vocational education programs and job training.

One of the stated purposes in the 1976 Amendments is "to overcome sex discrimination and sex stereotyping in vocational education programs." Five major administrative requirements of State vocational programs directly relate to this purpose. They include: (1) designating full-time personnel to provide State leadership that will eliminate sex bias and discrimination in vocational education programs; (2) representing women's concerns on the State advisory councils for vocational education; (3) indluding in State five-year plans for vocational education the policies and procedures the State will use to eradicate sex discrimination in all State and local vocational programs; (4) reviewing annual program plans and accountability reports for compliance with State policies regarding eradication of sex discrimination; and (5) evaluating vocational education programs for service to women.

Major sex discrimination, sex bias, and sex stereotyping provisions of the 1976 Amendments and definitions of the terms are attached in Appendix A.

EXPENDITURES

(A) State administered

The Vocational Education Act as amended in 1976 authorizes States to spend Federal funds for actions necessary to ensure equal access and attempts to integrate efforts to promote sex equity into every aspect of the vocational education system. Some expenditure information follows:

BUDGET—FEDERAL APPROPRIATIONS

[In millions]

Basic grants: 1979: $474.8 1980: $562.3 1981: $518.1	The $50,000 available to each State for sex equity coordinators is provided from this budget category. Additionally, States must spend some funds from this basic grant for displaced homemakers. According to annual State program plans, 55 States and territories planned to spend $2,797,590 Federal funds and $990,356 State/local funds in 1980.
Program improvement and support services: 1979: $112.3 1980: $124.8 1981: $93.3	States have the option of using some of these program funds to overcome sex bias. In fiscal year 1981, 35 States planned to spend $2,339,986 of these Federal funds for sex equity. In 1979 $1.3 million Federal and $160,000 non-Federal funds were spent on grants to reduce sex bias. States must give priority to exemplary and innovative projects designed to reduce sex-role stereotyping.
Consumer and homemaking education: 1979: $43.5 1980: $43.5 1981: $43.5	A portion of these funds are used to promote and insure sex equitable practices in the development of curriculum materials, to make the programs more flexible and more appealing to males as well as females.

(B) Federal discretionary

Programs of National Significance provide Federal leadership for innovation in vocational education that is targeted to national needs. The Office of Vocational and Adult Education has funded several projects of national significance which address sex equity issues.

In 1978 and 1979 four sex equity projects were funded for a total of $1.6 million. In 1980 one sex equity project was funded for $446,667, and in 1981 one project was funded for $50,000. Appendix B provides details on these projects.

(C) Support services

To help women get involved and stay in nontraditional programs, States provide "support services" to prepare them for employment in jobs traditionally limited to men. In fiscal year 1979 according to data from the National Center for Education Statistics, a total of $887,092 was spent on support services for women (64 percent Federal). This represents a tremendous growth in expenditures from fiscal year 1978 when $586,496 was spent, of which only 12.8 percent was Federal. Further evidence of increased commitment to these support services is the number of States supporting such activities: five in 1978, thirteen in 1979. Other initiatives adopted by States include peer support services for women in nontraditional vocational education programs.

Appendix C provides State summaries of the vocational education Sex Equity Coordinators' activities promoting sex equity and providing special support services for women.

SEX EQUITY AND VOCATIONAL EDUCATION

During the last five years, enrollments in vocational education have been increasing and changing. The following chart shows a three-year increase in female and male enrollments in occupational areas that have been traditionally for one gender:

PERCENT OF FEMALE AND MALE SECONDARY AND POSTSECONDARY ENROLLMENTS IN NONTRADITIONAL PROGRAMS [1]

Program	1977	1978	1979
Female:			
Agriculture	14.9	17.3	19.4
Distributive education	49.7	51.4	54.0
Technical	17.0	17.6	19.8
Trades and industry	14.4	15.4	17.5
Male:			
Consumer and homemaking	18.4	19.8	21.5

PERCENT OF FEMALE AND MALE SECONDARY AND POSTSECONDARY ENROLLMENTS IN NONTRADITIONAL PROGRAMS [1]—Continued

Program	1977	1978	1979
Occupational home economics	16.1	17.6	18.3
Office	24.6	24.4	27.0
Health	21.8	22.1	16.1

[1] U.S. Department of Education, Office of Vocational and Adult Education, and the National Center for Education Statistics.

The following chart shows that vocational education staffing remains fairly traditional in specific programs:

INSTRUCTIONAL STAFF PROFILES IN VOCATIONAL EDUCATION PROGRAMS [1]

Program	Female staff	Male staff
Health	95.5	4.5
Home economics	88.7	11.3
Business and office	69.8	30.2
Distributive education	25.4	14.6
Agriculture	12.3	87.7
Trade and industrial	5.5	91.5
Technical occupations	4.5	95.5

[1] Vocational Education Equity study, the American Institute for Research, April 1979 (staffing profiles for 1978).

The chart indicates that one gender dominates the fields of Agriculture, Technical Occupations, Trade and Industry, Home Economics and Health. At the State level, males dominate in all areas except Home Economics and Health. At the district level, 90 percent of directors of vocational education and 59 percent of the counselors are male.

SUMMARY

An increase in female enrollment in training for non-traditional occupations has been building at a steady pace over the past decade. Females now represent 52 percent of postsecondary vocational education students. The presence of these more than two million women students reflect a growing phenomenon—the desire of a majority of adult females to earn a living outside the home and to acquire positive career skills.

Vocational education has provided an added opprotunity for both sexes to choose freely an area of vocational training.

APPENDIX A.—MAJOR SEX DISCRIMINATION/SEX BIAS/SEX STEREOTYPING PROVISIONS, PUBLIC LAW 94-482

EDUCATION AMENDMENTS OF 1976

TITLE II—VOCATIONAL EDUCATION

(References Verbatim from Legislation)

PART A—STATE VOCATIONAL EDUCATION PROGRAMS

DECLARATION OF PURPOSE

1. Sec. 101 (3); (20 U.S.C. 2301.), 90 Stat. 2169.

SEC. 101. It is the purpose of this part to assist States in improiving planning in the use of all resources available to them for vocational education and manpower training by involving a wide range of agencies and individuals concerned with education and training within the State in the development of the vocational education plans. It is also the purpose of this part to authorize Federal grants to states to assist them—

(3) to develop and carry out such programs of vocational education within each State so as to overcome sex discrimination and sex stereotyping in vocational education programs (including programs of homemaking), and thereby furnish equal educational opportunities in vocational education to persons of both sexes.

Subpart 1—General Provisions

STATE ADMINISTRATION

2. Sec. 104(b)(1), (A) through (I), and (2); (20 U.S.C. 2304.,) 90 Stat. 2173.

SEC. 104. (b)(1) Any State desiring to participate in the programs authorized by this Act shall also assign such full-time personnel as may be necessary to assist the State board in fulfilling the purposes of this Act by—

(A) taking such action as may be necessary to create awareness of programs and activities in vocational education that are designed to reduce sex stereotyping in all vocational education programs;

(B) gathering, analyzing, and disseminating data on the status of men and women, students and employees in the vocational education programs of that State;

(C) developing and supporting actions to correct any problems brought to the attention of such personnel through activities carried out under clause (b) of this sentence;

(D) reviewing the distribution of grants by the State board to assure that the interests and needs of women are addressed in the projects assisted under this Act;

(E) reviewing all vocational education programs in the State for sex bias;

(F) monitoring the implementation of laws prohibiting sex discrimination in all hiring, firing, and promotion procedures within the State relating to vocational education;

(G) reviewing and submitting recommendations with respect to the overcoming of sex stereotyping and sex bias in vocational education programs for the annual program plan and report;

(H) assisting local educational agencies and other interested parties in the State in improving vocational education opportunities for women; and

(I) making readily available to the State board, the State and National Advisory Councils on Vocational Education, the State Commission on the Status of Women, the Commissioner and the general public, information, developed pursuant to this subsection.

Sec. 104(b)(2); (20 U.S.C. 2304.), 90 Stat. 2173.

(2) From the funds appropriated to carry out subpart 2, each State shall reserve $50,000 in each fiscal year to carry out this subsection.

STATE AND LOCAL ADVISORY COUNCILS

3. Sec. 105(a)(17); (20 U.S.C. 2305, 29 U.S.C. 817.) 90 Stat. 2174-2175.

SEC. 105. (a) Any State which desires to participate in programs under this Act for any fiscal year shall establish a State advisory council, which shall be appointed by the Governor or, in the case of States in which the members of the State board of education are elected (including election by the State legislature), by such board. Members of each State advisory council shall be appointed for terms of three years except that (1) in the case of the members appointed for fiscal year 1978, one-third of the membership shall be appointed for terms of one year each and one-third shall be appointed for terms of two years each, and (2) appointments to fill vacancies shall be for such terms as remain unexpired. Each State advisory council shall have as a majority of its members persons who are not educators or administrators in the field of education and shall include as members one or more individuals who—

(17) are women with backgrounds and experiences in employment and training programs, and who are knowledgeable with respect to the special experiences and problems of sex discrimination in job training and employment and of sex stereotyping in vocational education, including women who are members of minority groups and who have, in addition to such backgrounds and experiences, special knowledge of the problems of discrimination in job training and employment against women who are members of such groups.

FIVE-YEAR STATE PLANS

4. Sec. 107(b)(4)(A) i, ii, iii, I and II, and (B); (20 U.S.C. 2307.), 90 Stat. 2180-2181.

SEC. 107 (b) The five-year State plans shall be submitted to the Commissioner by the July 1st preceding the beginning of the first fiscal year for which such plan is to take effect and shall—

(4)(A) set forth policies and procedures which the State will follow so as to assure equal access to vocational education programs both women and men including—

(i) a detailed description of such policies and procedures,

(ii) actions to be taken to overcome sex discrimination and sex stereotyping in all State and local vocational education-programs, and

(iii) incentives, to be provided to eligible recipients so that such recipients will—

(I) encourage the enrollment of both women and men in nontraditional courses of study, and

(II) develop model programs to reduce sex stereotyping in all occupations.

(B) set forth a program to assess and meet the needs of persons described in section 120 (b)(1)(L) which shall provide for (i) special courses for such persons in learning how to seek employment and (ii) placement services for such graduates of vocational education programs and courses.

ANNUAL PROGRAM PLANS AND ACCOUNTABILITY REPORTS

5. Sec. 108(b)(1)(C) ii; (20 U.S.C. 2308.); 90 Stat. 2182.

SEC. 108(b) The annual program plan and accountability report shall be submitted to the Commissioner by the July 1st preceding the beginning of the fiscal year for which the plan is to be effective. This plan and report shall contain:

(1) planning provisions which—

(C) show the results of the—

(ii) compliance of the State plan with the provisions contained in section 107(b)(4)(A) concerning providing equal access to programs by both men and women.

SUBMISSION OF PLANS; WITHHOLDING AND JUDICIAL REVIEW

6. Sec. 109(B); (20 U.S.C 2309.), 90 Stat. 2183.

SEC. 109 (B) In carrying out the provisions of this subsection, the Commissioner shall not approve a State plan or annual program plan and report until he has received assurances that the personnel assigned to review programs within the State to assure equal access by both men and women under the provisions of section 104 (b) have been afforded the opportunity to review the plan or program plan and report.

Subpart 2—Basic Grant

AUTHORIZATION OF GRANTS AND USES OF FUNDS

7. Sec. 120 (b)(1) (J), (L) i, ii, iii, iv; (20 U.S.C. 2330.), 90 Stat. 2187-2188.

SEC. 120. (b)(1) Grants to States under this subpart may be used, in accordance with five-year State plans and annual programs plans approved pursuant to section 109, for the following purposes:

(J) support services for women who enter programs designed to prepare individuals for employment in jobs which have been traditionally limited to men, including counseling as to the nature of such programs and the difficulties which may be encountered by women in such programs, and job development and job followup services.

(L) vocational education for—

(i) persons who had solely been homemakers but who now, because of dissolution of marriage, must seek employment;

(ii) persons who are single heads of households and who lack adequate job skills;

(iii) persons who are currently homemakers and part-time workers but who wish to secure a full-time job; and

(iv) women who are now in jobs which have been traditionally considered jobs for females and who wish to seek employment in job areas which have not been traditionally considered for job areas for females, and men who are now in jobs which have been traditionally considered jobs for males and who wish to seek employment in job areas which have not been traditionally considered job areas for males.

Subpart 3—Program Improvement and Supportive Services

AUTHORIZATION OF GRANTS AND USES OF FUNDS

8. Sec. 130(b)(6); (20 U.S.C. 2350.), 90 Stat. 2191.

(b) Grants to States under this subpart may be used, in accordance with five-year State Plans, and annual program plans approved pursuant to section 109, for the following purposes:

(6) grants to overcome sex bias as described in section 136.

RESEARCH

Sec. 131(a)(2)(3); (20 U.S.C. 2351.), 90 Stat. 2191-2192.

Sec. 131. (a) Funds available to the States under section 130(a) may be used for support of State research coordination units and for contracts by those units pursuant to comprehensive plans of program improvement involving—

(2) experimental, developmental, and pilot programs and projects designed to test the effectiveness of research findings, including programs and projects to overcome problems of sex bias and sex stereotyping;

(3) improved curriculum materials for presently funded programs in vocational education and new curriculum materials for new and emerging job fields, including a review and revision of any curricula developed under this section to insure that such curricula do not reflect stereotypes based on sex, race, or national origin.

EXEMPLARY AND INNOVATIVE PROGRAMS

9. Sec. 132(b); (20 U.S.C. 2352.), 90 Stat. 2193.

(b) Every contract made by a State for the purpose of funding exemplary and innovative projects shall give priority to programs and projects designed to reduce sex stereotyping in vocational education and shall, to the extent consistent with the number of students enrolled in nonprofit private schools in the area to be served whose educational needs are of the type which the program or project involved is to meet, provide for the participation of such students; and such contract shall also provide that the Federal funds will not be commingled with State or local funds.

CURRICULUM DEVELOPMENT

10. Sec. 133(a)(2); (20 U.S.C. 2353.), 90 Stat. 2193.

Sec. 133. (a) Funds available to the States under section 130(a) may be used for contracts for the support of curriculum development projects, including—

(2) the development of curriculum and guidance and testing materials designed to overcome sex bias in vocational education programs, and support services designed to enable teachers to meet the needs of individuals enrolled in vocational education programs traditionally limited to members of the opposite sex.

VOCATIONAL GUIDANCE AND COUNSELING

11. Sec. 134(a)(4); (20 U.S.C. 2354.), 90 Stat. 2193-2194.

Sec. 134. (a) Not less than 20 per centum of the funds available to the States under section 130(a) shall be used to support programs for vocational development guidance and counseling programs and services which, subject to the provisions of subsection (b), shall include—

(4) vocational guidance and counseling training designed to acquaint guidance counselors with (A) the changing work patterns of women, (B) ways of effectively overcoming occupational sex stereotyping, and (C) ways of assisting girls and women in selecting careers solely on their occupational needs and interests, and to develop improved career counseling materials which are free.

VOCATIONAL EDUCATION PERSONNEL TRAINING

12. Sec. 135(a)(2); (20 U.S.C. 2355.), 90 Stat. 2194.

Sec. 135. (a) Funds available to the States under section 130(a) may be used to support programs or projects designed to improve the qualifications of persons serving or preparing to serve in vocational education programs, including teachers, administrators, supervisors, and vocational guidance and counseling personnel, including programs or projects—

(2) which provide in-service training for vocational education teachers and other staff members, to improve the quality of instruction, supervision, and administration of vocational education programs, and to overcome sex bias in vocational education programs.

GRANTS TO ASSIST IN OVERCOMING SEX BIAS

13. Sec. 136; (20 U.S.C. 2356.), 90 Stat. 2195.

SEC. 136. Funds available to the States under section 130(a) may be used to support activities which show promise of overcoming sex stereotyping and bias in vocational education.

Subpart 5—Consumer and Homemaking Education

CONSUMER AND HOMEMAKING EDUCATION

14. Sec. 150(b) (B), (E); (20 U.S.C. 2380.), 90 Stat. 2196.

(b) Grants to States under this subpart may be used, in accordance with five-year State plans and annual program plans approved pursuant to section 109, solely for (1) educational programs in consumer and homemaking education consisting of instructional programs, services, and activities at all educational levels for the occupations of homemaking including but not limited to consumer education, food and nutrition, family living and parenthood education, child development and guidance, housing and home management (including resource management), and clothing and textiles which—

(B) encourage elimination of sex stereotyping in consumer and homemaking education by promoting the development of curriculum materials which deal (i) with increased numbers of women working outside the home, and increased numbers of men assuming homemaking responsibilities and the changing career patterns for women and men and (ii) with appropriate Federal and State laws relating to equal opportunity in education and employment.

(E) prepare males and females who have entered or are preparing to enter the work of the home

PART B—NATIONAL PROGRAMS

Subpart 1—General Provisions

NATIONAL ADVISORY COUNCIL ON VOCATIONAL EDUCATION

15. Sec. 162(a)(6); (20 U.S.C. 2392, 951.), 90 Stat. 2199.

SEC. 162. (a) The National Advisory Council on Vocational Education, established pursuant to section 104(a) of the Vocational Education Act of 1963, in effect prior to the enactment of the Education Amendments of 1976, shall continue to exist during the period for which appropriations are authorized under this Act. Individuals who are members of the Council on the date of the enactment of this Act may continue to serve for the terms for which they were appointed. Members appointed to succeed such individuals shall be appointed by the President for terms of three years. The Council shall consist of twenty-one members, each of whom shall be designated as representing one of the categories set forth in the following sentence. The National Advisory Council shall include individuals—

(6) who are women with backgrounds and experiences in employment and training programs, who are knowledgeable with respect to problems of sex discrimination in job training and in employment, including women who are members of minority groups and who have, in addition to such backgrounds and experiences, special knowledge of the problems of discrimination in job training and employment against women who are members of such groups.

Appendix A.—Definitions:

The following definitions apply for the purposes of the Education Amendments:

Sex bias—behaviors resulting from the assumption that one sex is superior to another.

Sex stereotyping—attributing behaviors, abilities, interests, values, and roles to a person or groups of persons on the basis of sex.

Sex discrimination—any action which limits or denies a person or group of persons opportunities, privileges, roles, or rewards on the basis of sex.

APPENDIX B.—PROGRAMS OF NATIONAL SIGNIFICANCE

1978—Education Testing Service of Princeton, N.J. received funding of $403,536 for a three-year project, "Credentialling Women's Life Experiences," to disseminate its products to sex equity and displaced homemaker program practitioners. The two publications, "Making Experience Count in Vocational Education," and "Making Experience Count in Sex Equity Programs" were also disseminated through four workshops held throughout the county and to the National Curriculum Coordination Centers. They are also available through the Educational Resources Information Center (ERIC).

"The Vocational Needs of Adult Women Offenders" was funded at $277,931 for 2 years. One America, Inc. of Washington, D.C. reviewed the vocational program for women offenders within the State and community-based correctional systems and identified and documented successful vocational training programs. The project provided data on effectiveness of those programs which seek to provide for the economic re-entry of the women offender.

1979—"Second Look" a two-year project to help displaced homemakers move over from housework to paid work through vocational training was funded at $488,017. Education Development Center of Newton, Massachusetts, in collaboration with the Wellesley College Center for Research of Women developed the following products: 1) a Resource Guide for Vocational Educators and Planners, 2) a Manual for Vocational Counselors, 3) TV Public Service Spots encouraging employers to hire and train displaced homemakers, and 4) TB Public Service Spots in English and Spanish and a Leaflet informing displaced homemakers about opportunities available in training and employment.

Technical Education Research Centers of Cambridge, Massachusetts was funded at $521,690 to carry out The Women's Outreach Project. Two publications are in the process of being disseminated.

(1) "The Nuts and Bolts of NTO," a handbook for recruiting, training, support services and placement of women in nontraditional occupations.

(2) "Time for a Change: A Woman's Guide to Nontraditional Occupations," describes jobs and helps readers to decide whether nontraditional occupations are for them.

Schools, industry, CETA, unions, career counseling services, and government agencies will use the handbook to establish an NTO program for women. The Guide can be used for homemakers and career changes, vocational educators, career counselors, social service providers, employers, union officials, CETA staff and continuing education personnel.

In 1980 the following project of national significance was funded:

1. "Sex Equity in Vocational Education: Development of a Support Service System," conducted by Far West Laboratory for Educational Research and Development in association with the National Center for Research in Vocational Education and the American Association of Community and Junior Colleges at a funding level of $446,667.

This project provided four products as follows:

(1) a directory "Promising Programs for Sex-Fair Vocational Education," documenting 47 promising approaches to sex-fair vocational education for target groups such as displaced homemakers, single heads of households, unemployed youth.

(2) an annotated compilation, "Resources and References for Sex-Fair Vocational Education," provides information on resources funded under the Vocational Education Act through the State grant program as well as materials identified through sex equity information resources.

(3) "Vocational Education: The Role of Women and Men in the Reindustrialization of America," a summary of the proceedings of a conference held at the National Center for Research in Vocational Education for the State Directors of Vocational Education and the State Sex-Equity Coordinators from each State. The conference addressed the topic of vocational education's role in reindustrialization from six perspectives: historical, economic, planning, evaluation, political, and business. The publication also consists of descriptions of the six technical assistance workshops offered at the conference. These summary descriptions are designed so that others may replicate these workshops in their States.

(4) Sex Equity Training Manuals—eight manuals enable users to conduct workshops on mainstreaming sex equity techniques and programs in the following occupational areas: agriculture, business, trade and industrial, distributive education, home economics, health, industrial arts and technical education.

In 1981 a project was funded by the Office of Research and Development of the Department of Labor and the Office of Vocational and Adult Education jointly at

$50,000 and given to the National Academy of Sciences to review and assess women's employment and related issues particularly with regard to job segregation by sex. The purpose of the project was also to make recommendations and stimulate needed research into these issues, to make agencies aware and to influence their policy with regard to job segregation.

APPENDIX C

STATE SUMMARIES

Sex Equity Coordinators are providing technical assistance, resource materials and incentives to motivate change. Special projects and products are serving as model programs to ensure that there will be equal access for both sexes to all vocational programs and activities. Each state has a different annual program of work. However, the state reports indicate similar sex equity activities; a familiar pattern of changes in nontraditional program enrollment statistics; and indication of low nontraditional program enrollment in the same programs in each state.

Activities of Sex Equity Coordinators have continued to change since 1977. The past two years show more "action" and less "creating awareness" of sex equity in vocational education. Coordinators are providing more technical assistance; data is being carefully analyzed; programs that encourage nontraditional training and those providing special services for displaced homemakers continue to promote equal opportunities for students.

The following pages summarize the unique ways in which each of the states is promoting sex equity in vocational education. Included are: brief summaries by state; state profiles of incentives, activity highlights; and enrollment data.

This section of the position paper sketches a picture of ways in which the 1976 Vocational Education Amendments provided the vehicle for action to eliminate sex bias, sex discrimination and sex stereotyping in vocational education programs and activities.

BRIEF SUMMARY BY STATE

Alabama provided funding for all eligible recipients of federal vocational education dollars who submitted a proposal for an exploratory sex equity program. Forty percent of the recipients were identified as annual programs that encouraged nontraditional enrollments.

A statewide "talent bank" of local personnel has been set up in Alaska to assist school districts in sex equity training. The widespread geographic range and inclement winter weather demand a telephone and television communications network as well as locally-trained vocational educators to provide technical assistance on sex equity.

Arizona is media-product oriented and has produced films, slide-shows, manuals, newsletters, and simulation games to be used by vocational educators, community groups, and to share with other states. The sex equity program is dependent on successful community networking.

There is recognition in Arkansas that teachers and administrators are meeting the sex equity guidelines in P.L. 94-482, but the real challenge lies in changing the attitudes of administrators, teachers, parents, students and the business community. Priorities are directed at attitudinal change.

The "World of Apprenticeship" is California's film series contribution to sex equity with presentations on operating engineers, the culinary trades, carpenters and the automotive trades. California serves as a model state for developing cooperative programs with labor agencies and vocational education to recruit females into nontraditional occupations. They also have 600 trainers ready to conduct school-site workshops.

Business, community based organizations and educational institutions are part of a Colorado sex equity communications network. Materials, purposes, needs and other information are collected, analyzed and disseminated. Critical issues for sex equity planning began with gathering opinions of vocational education personnel and with a priority-establishing task force.

Connecticut holds "Women's Technology Exploration Day" for the general public, high school seniors, undergraduates with undeclared majors, and displaced homemakers. They work on math anxiety, listen to women working in technology, and have hands-on tours in graphics, construction, manufacturing, power systems, vocational-technical education and industrial arts education. There is someone responsible for sex equity in every institution with vocational approval.

There is a 25-member state-wide sex equity task force in Delaware that has been operating over 3 years. They have helped develop workshops serving more than 5,000 persons. College credit was offered to some. Many junior high schools are adopting mandated rotations of male and female students in homemaking and industrial arts programs.

Cooperative vocational education is providing work experience in nontraditional occupations for females in the District of Columbia. The program is done in cooperation with the C & T Telephone Company, Giant Foods Corporation, Washington Naval Yard, and the D.C. Department of Transportation. A Project with the Department of Housing and Community Development and the District of Columbia Foundation for Vocational Training helped four female carpentry trainees restore a home damaged by fire.

All model program projects funded in Florida through vocational education are required to coordinate with other agencies working toward increasing the numbers of women in nontraditional occupations. A Santa Fe Community College project was recognized by CETA as one of 25 outstanding nontraditional programs in the nation.

Each vocational area in Georgia provides an outlined summary of progress for sex equity activities. For instance, the home economics program goal was to encourage male members in FHA. All requests for proposals for curriculum development include instructions on addressing sex bias and sex stereotyping. Materials leaving the curriculum center are labeled "non-biased."

Staff incentives for Hawaii's model programs and exemplary projects have been in the form of college credits, stipends, release time, and special publicity for the project. During a five-year period, every high school in the state will have administrators, instructors and counselors participating in an equal goals in occupations workshop.

Idaho provided mini-grants of less than $1,000 each to LEA's for projects and programs to overcome sex discrimination, and for those that address the needs of women. A self-evaluation checklist is used to ensure that sex equity concepts are included in the development and implementation of all program standards.

There is a special program in Illinois to identify and develop techniques for student recruitment that is fair in terms of sex, age, race and ethnic background. A cement mason's/laborer's apprentice training program is currently training 20 women for jobs as cement mason apprentices or construction laborers in Illinois.

A sex equity component is included in every Indiana workshop and inservice training activity sponsored by the state board. Agencies developing model programs that reduce sex bias and sex stereotyping and those that encourage nontraditional enrollments will be recognized at the annual vocational conference.

All area schools in Iowa insure in writing that they have made an effort to provide catalogs, brochures and guidance activities that are free of sex-role stereotyping and bias. Certificates of recognition are awarded vocational student organizations for developing and disseminating materials to increase the participation of both males and females in nontraditional occupations.

Kansas has a directory of nontraditional workers and a strategies handbook for use with the directory. There was a special project on employment barriers related to sex fairness. The 1981 annual program plan includes establishing pilot multi-purpose centers for displaced homemakers and other special groups.

Three major barriers to nontraditional vocational enrollments in Kentucky were identified in a study done in 1979. There is indication that performance skills are being compared between male and female students. Students believe that nontraditional enrollees are uncomfortable in class. Parents of nontraditional students felt that certain vocational courses were more appropriate for one sex than the other.

Sex equity materials from Louisiana were displayed and shared at the vocational association conference, the association of educators conferences, and the state fair. Officers of vocational student organizations were part of the sex equity advisory council.

Maine provides sex equity mini-grants to correct identified problems. A "resource bank" lists individuals and organizations that are available to assist in promoting sex equity concepts in local agencies. Studies are supported that help improve nontraditional enrollments. Vocational agencies must submit a plan for nontraditional recruitment by January 1981.

Maryland has almost 40 percent enrollment of women in postsecondary trade and industrial programs. The "New Directions for Women" center for displaced homemakers in Baltimore has provided services to over 4,000 women since 1976. The center trains displaced homemakers to present sex equity workshops for high school students as part of their comprehensive program.

An annual admissions update plan is required in selected secondary vocational schools in Massachusetts. Admissions procedures, practices and policies are described on the basis of applications, acceptances, and enrollments by sex, special needs, limited English speaking, and ethnic origin. Nontraditional vocational students produced four booklets to help others start nontraditional support groups.

A Michigan study of the earnings gap between male and female graduates for 1977 and 1978 shows that men continue to earn higher salaries than women though there are signs toward salary equalization in the health occupations. Program improvement grants for sex equity materials went to 480 secondary agencies and 29 community colleges.

Local education agencies in Minnesota prepare "Five Year Sex Equity Plans of Action" which are approved by the local school board. Technical assistance and a handbook on developing action plans come from the sex equity coordinator. Each area vocational-technical institute has a sex equity committee.

A state sex equity poster contest was held in Mississippi in 1980. The three winners received cash prizes at a special awards ceremony. The first place poster was printed and disseminated to all state educational institutions. Many local districts held their own contests.

There were $100,000 worth of free public service announcements on vocational education sex equity on Missouri television and radio stations. Project priorities encouraged nontraditional enrollments, and included handbooks for recruiting females into trade and industrial programs and males into health occupations. Twenty LEA's will receive special funds for increasing nontraditional enrollments by 10 percent.

Nontraditional and equal access to vocational programs was the subject of Montana's Superintendent of Public Instruction's radio announcements. Three-day workshops were held for vocational instructors in five locations. Travel reimbursement, lodging and per diem were offered as incentives.

An evaluation instrument in Nebraska contains quality indicators designed to identify potential obstacles to equal access. A research project on males and females in nontraditional occupations is looking at success, problems, positions, and salaries of nontraditional workers. Two projects have been funded to enhance minority women's success in vocational training and employment.

In-service training on sex equity was provided to all persons attending the Nevada vocational conference. There was a brochure and bulletin board project to encourage males to enroll in home economics programs. Another project encouraged 30 to 50 year olds to return to school and train in nontraditional programs.

Teacher certification requirements in New Hampshire include competency in both sex and race equity. Dollars were made available to help train two female industrial arts teachers. Proposal writers have received guidelines on how to prepare a sex-fair proposal.

New Jersey was the first state to develop a directory of people in nontraditional jobs. Presentations on nontraditional careers and related in-service activities for teachers traveled in a mobile van to various school sites. A special project was funded to improve the career aspirations of female Hispanic youth.

A statewide senior essay contest was held in New Mexico on "How Sex Stereotyping Can Affect My Career Choice." Prizes were a $50 savings bond and a commemorative plaque. A young mother's center provides support services for school-aged parents who need to continue high school and to enter the work world.

Special recognition has been given to New York sex equity documentaries in film festivals. Public service announcements have been aired 300,000 times. A job network information service announces administrative job openings and maintains a pool of over 500 job applicants, resulting in a 100% increase in the number of female educational administrators.

The sex equity incentive system in North Carolina provides certificates of achievement and press coverage to LEA's showing nontraditional enrollment changes, staff development programs, and local action plans. CETA funds managed through the Council on the Status of Women, helped train women in bricklaying, carpentry, heavy equipment operation and electrical wiring.

There are regional sex equity activities in North Dakota that include equity workshops for vocational educators. Each educator from the eight regions is required to do an activity in his/her own school. Mini-grants are offered to LEA's.

Males and females are changing their thinking in Ohio as females have significantly increased enrollments in 58 nontraditional programs and males have increased enrollments in 32 nontraditional programs over a three-year period. A publication on improving sex equity incareer education and vocational classrooms has served as a self-help document for vocational personnel.

There are three rural displaced homemaker programs in Oklahoma that are a cooperative effort between the State Departments of Vocational-Technical Education, Economic and Community Affairs, and the regional office of the Department of Labor. "Voc-Tech Encounters of the Nontraditional Kind" was the clever title of area workshops.

A phone-in education project in Oregon helps displaced homemakers, single parents, part-time workers, and handicapped persons improve their job skills, particularly business math and basic skills. Another project seeks jobs with private industry for women who are economically disadvantaged, unemployed and underemployed.

Pennsylvania's program to coordinate sex equity efforts between vocational education and CETA prime sponsors is unique. The state board policy on sex equity encourages the involvement of parents and the community as well as sex-fair instruction and counseling.

Sex equity materials are presented in Spanish in Puerto Rico where a top priority is the recruitment, retention, and placement of women in nontraditional vocational programs. In agricultural production there has been a change from 65 females in 1977 to 152 females in 1979 and in child development and guidance from 36 males in 1977 to 101 in 1979.

There have been three statewide sex equity conferences in Rhode Island for educators, legislators, community-based agency personnel, and parents. A separate nontraditional options workshop was held for parents of ninth grade students. Over 350 women attended a job information fair sponsored jointly by the Associated General Contractors and the Bureau of Vocational-Technical Education.

Prospective employers of nontraditional workers in South Carolina were consulted for suggestions on how to effectively place women in the work force. An exploratory program for females in welding includes on-site visitations of welding industries for counselors, principals, district office staff, and welding teachers.

South Dakota held a youth organization cartoon contest entitled, "Sex Equity in Today's Life." The State Board staff works with the Board of Charities and Corrections to provide apprenticeship or cooperative education work placement release opportunities, emphasizing nontraditional opportunities for inmates of the women's correction facilities.

More than 500 Tennessee vocational programs were reviewed in 1980 for progress in sex equity. Representation of women on vocational advisory committees was a priority. Curriculum materials were updated to be sex-fair in most programs.

Three years ago, there were no female welding students in Texas. A special project encouraged 85 women to enroll. Twenty-five thousand sex-fair vocational program brochures were printed and mailed to local independent school districts. A current thrust is to increase equal access and equal opportunity concepts to vocational guidance personnel.

A four-year Utah program encourages vocational opportunities through equity in 21 education agencies. Workshops for students and parents, sex-fair instructional activities, employer tours, media production, and development of an equity indicator instrument are all part of the expanded careed selection project.

Nontraditional careers are promoted in Vermont and a thrust has been made to encourage the recruitment of nontraditional vocational teacher training. Media coverage of exceptional programs, commendation letters to school districts and award certificates to teachers are annual incentives.

The Virginia vocational sex equity office provided funds for a workshop to prepare home economics teachers to work with displaced homemakers. Aviation careers were explored in a 12-week orientation and ground school program. Participants completed the federal aviation administration examination. Four college scholarships were given to students preparing to teach in a nontraditional program.

Each community college in Washington has programs and services for displaced homemakers and support services for women partially supported through federal vocational funds. A K-12 equity network meets bimonthly to discuss and share materials and information. The sex equity resource library disseminates over 3,000 requests annually.

There are more than 10 percent females in all but ten of West Virginia's trade and industrial programs. Each LEA is required to submit an annual plan for recruiting males and females into nontraditional programs. Specific emphasis is on the placement and follow-up of nontraditional program completers.

The sex equity awareness for parents campaign in Wisconsin consisted of nontraditional career brochures, radio announcements, posters and role models for parents to encourage their children to consider nontraditional programs. A vocational equity incentive system provides up to 15 points each fiscal year toward federal reimbursement dollars to LEA's. More than half of the eligible recipients participated.

A study of the barriers to employment and vocational education services in Wyoming as perceived by rural women was conducted in six counties. Emphasis on inservice training for state and university staff on sex equity materials and techniques is a priority for 1980–1982. Special projects encouraged women to enter agriculture and construction technology programs.

STATE PROFILES

Alabama

Grants were provided for model programs to reduce sex bias and sex-role stereotyping. Among them was a handbook "Equity for Local Superintendents and Local Directors of Vocational Education, Title XI Coordinators and Section 504 Coordinators." Special programs supporting women in nontraditional roles attracted over 500 participants. Displaced homemakers were a priority in the postsecondary schools. Cooperation between women's groups and CETA helped with services in job exploration, job seeking, and job interviewing.

The sex equity coordinator participated in on-site reviews and monitored the sex equity plans in 127 annual applications. Special efforts were made to ensure equal facilities and equipment for both sexes.

Enrollments from 1977 to 1980 show an increase of females in 7 Agriculture programs and Trade and Industrial programs. Male enrollments in nontraditional programs increased in Health Occupations and Home Economics. Distributive Education is tending to equalize male/female enrollments throughout the programs. Enrollment data were distributed to local area personnel along with recommendations for providing nontraditional training opportunities.

Alaska

Sex equity self-evaluations were completed by all local school districts and technical assistance was provided to help efforts in reducing sex stereotyping in vocational programs. A statewide talent bank of administrators, counselors, and vocational educators were trained to assist local districts in promoting sex equity.

Follow-up surveys from local counselors and administrators identified problem areas that needed attention. This included the lack of women vocational education instructors in nontraditional areas and recognition of a retention problem of males and females enrolled in nontraditional courses.

Enrollment data shows few students in nontraditional training and special efforts are being made to improve enrollment patterns. Data is distributed to the State School Board, the State Advisory Board for Career and Vocational Education, the State Commission on the Status of Women and the general public.

Arizona

A citizen's task force on sex equity was formed at one community college and included representatives from business and industry, education, and government. Television public awareness programs and numerous audio visual products helped citizens accept men and women in nontraditional jobs.

All the high schools in one county benefited from a project called "New Frontiers," developed for teachers, parents and students. One phase of the project was a summer institute for selected junior high school students to introduce them to a variety of vocational curricula.

Six displaced homemaker programs were funded to provide educational programs to prepare displaced homemakers for seeking employment. A statewide technical assistance project provides assistance to educators working with displaced homemakers. Activities included a statewide conference on displaced homemakers, four widely-distributed newsletters, and regional workshops.

Arkansas

Career fairs are sponsored in schools to give students the opportunity to explore nontraditional careers with nontraditional workers. Students are recruited in junior high to go into nontraditional programs in high school. Exploratory courses are recommended and field trips are taken to observe nontraditional employees on-the-job.

Special committees review sex equity guidelines and monitor for sex equity compliance. Local advisory boards are utilized in recommending further action. Students are encouraged to enter nontraditional competitive events in student organizations. Junior executive training programs that show equal number of males and females have been developed. Family living classes encourages males to learn household responsibilities.

Female enrollments have increased greatly in agriculture production, carpentry, drafting, electronics, graphic arts, and distributive education. Male enrollments have a large increase in home economics, commercial art, quantity foods, typing, nurse aide, and textile production and fabrication.

California

Community colleges have funds to develop plans to recruit, retain and place nontraditional vocational students. Secondary districts have special projects to modify one or more programs to achieve sex equity. Incentives are provided for model programs to increase nontraditional enrollments. All community colleges were required to use 50 percent of their subpart 3 allocation for sex equity in 1980–81.

"The World of Apprenticeship" is a series of four slide/tape programs that show nontraditional roles in construction, operating engineering, culinary art, and the auto mechanics. Labor unions are playing a major role in developing this series. The materials have been made available for use throughout the country. "Jack and Jill of all Trades" is a project that developed recruitment posters and brochures for each vocational program area.

Linkages between the Department of Labor agencies and the Department of Education agencies have resulted from the Sex Equity Coordinator's efforts. The Coordinator is a member of the Women in Apprenticeship Committee sponsored by the Division of Apprenticeship Standards. A coalition has formed between labor and education to recruit females into nontraditional occupations.

Enrollments show a trend toward 25 percent to 75 percent of one sex or another in most programs. There are significant increases in male enrollments in Health Occupations and Office Occupations.

Colorado

A "Sex Equity Communications Network" links Colorado businesses, community-based organizations and educational institutions throughout the state. These groups send sex equity needs and purposes to the network office where they are analyzed and compiled and disseminated upon request.

A statewide "opinionnaire" was distributed to vocational personnel requesting identification of critical areas for study in sex equity. A slide/tape presentation entitled, "Exploring Nontraditional Careers in Vocational Occupations" was developed for persons up to age 21 who need help in deciding on career goals. It includes information on the state's role in vocational education, discussions with students and employees in nontraditional careers, salary information, how to apply for courses and receive financial aid where necessary.

Enrollments at the secondary level which show an increase in nontraditional participation include cooperative merchandising, food management, business data processing, ornamental horticulture, criminal justice, commercial art, banking and finance. Postsecondary education enrollments showing a 40–60 percent nontradtional enrollment include: greenhouse operation, nursery operation real estate, food services, computer programming, petroleum technology, urban planning, environmental protection, and electronics.

Connecticut

During 1980–81 a special emphasis was placed on increasing the participation of adult women in technical and trade training and increasing inservice training in sex equity for administrators, counselors and instructors in vocational programs.

A mini-grant program aimed at increasing emphasis in specific sex equity programs substantially increased the displaced homemaker program from $20,000 to $128,000. Where extra support has been added to nontraditional programs, enrollment of women has moved from 18 percent to 35 percent in one year (1979–80).

Eleven mini-grants were funded and included "A Model for Providing Parental Awareness of Sex-Role Stereotying," "Women's Technology Exploration Day," "Equalizing Opportunity in Vocational Education at the Junior High/Middle Schools," "Eliminating Vocational Sex-Role Stereotypes by Children Through Creative Activity in Playwriting and Musical Composition," and "Programs for Displaced Homemakers and Women Seeking Technical Careers."

Enrollments at the secondary level have shown an increase in females in carpentry, industrial drafting, electical, electronics, plumbing, sheet metal and welding. At the postsecondary level, increased male enrollments are evidenced in homemaking and stenography, secretarial and related, health service occupations and personnel training.

Delaware

Special projects have been funded to include sex equity in occupational materials, introduction to nontraditional careers for women, changing work roles for men and women, nontraditional business careers, and Vocational Education Work Experience and Survival Workshop for Displaced Homemakers.

Quarterly reports on sex equity activities are submitted to the State Board of Education, the Governor's Commission on the Status of Women, the Advisory Council on Career and Vocational Education, the Task Force on Sex Equity and to other interested persons. Activities include a workshop entitled 'Women Get In Gear" which focused on nontraditional jobs in trades and technologies. The sex equity coordinator approved over 1,000 projects which addressed sex equity as a major objective or activity.

Some junior high schools have adopted rotations of students through homemaking and industrial arts education programs; and two voc-tech institutes have offered summer programs for seventh and eight grade students to explore non-traditional career options.

From 1977 to 1979 there has been an increase of females in agri-production, agri-products, horticulture and forestry. There has been an increase of males in health occupations and dental assisting, care and guidance of children, clothing management and food production and services. Technology programs have seen a large increase of women in architectural, civil, mechanical, fire and fire safety, and water and waste water technology. There has been an increase in male enrollments in filing, office machines and clerical occupations.

District of Columbia

A cooperative education on-the-job training project for females was supported by the Telephone Company, Giant Food, Washington Navy Yard and the Department of Transportation. Four female carpentry trainees worked on a project to restore a home completely gutted by fire. A cadre of student leaders was trained to present sex equity mini-workshops to students in thirty junior high schools. A 60-minute film called "Profile of Women in Nontraditional Trade Areas in the District of Columbia Metropolitan Area" was produced.

Cooperating organizations included Wider Opportunities for Women, D.C. Commission for Women, Minority Women in Government, Local Advisory Councils for Vocational Education, Roving Leaders (a D.C. recreation group), Far-East Communty Services, Community Improvement Services and the United Planning Organization.

Enrollments over a three-year period indicate an increase of females working in nontraditional roles of hotel/lodging, drafting and electronic occupations. There was an increase in the number of males in clothing/textiles, consumer education, home management, accounting and computing occupations, filing, office machines, clerical and stenographer-secretarial related occupations.

Florida

Funds are made available in all program areas to assure equal access and equal opportunity in vocational training. Exemplary sex equity programs are honored monthly in the Florida Journal of Vocational Education. A State Advisory Council for Sex Equity makes recommendations to the State Director of Vocational Education.

All sex equity projects that are funded as model programs are required to link with other agencies that have a priority of increasing the representation of women in nontraditional occupations. Cooperating agencies incude CETA, higher education and Title I programs. One of these projects was recognized by CETA as one of 25 outstanding vocational education programs in the country.

More than 22,000 equity posters were distributed in the state. A series of eight videotapes on how to organize a support system program for nontraditional students was developed for administrators as well as a slide-tape course on sex stereotyping for vocational guidance personnel.

All vocational programs have at least 15 percent males or females. Male enrollments have shown the greatest increase in home economics, business occupations and health occupations over the past four years. The greatest female enrollment increases have been in distributive education programs.

Georgia

Twenty vocational educators were trained from postsecondary educational vocational schools, CETA districts and selected school systems to conduct sex equity workshops in local education agencies. "Project Explore," funded by the Georgia Employment and Training Council is aimed at increasing the enrollment of CETA eligible males and females in nontraditional programs. Brochures to advertise T I programs were developed. The Marketing and Distribution staff encourages teachers to place male and female students with employers who are using the targeted tax credit program. The "Report on the Status of Males and Females in Vocational Education in Georgia," developed in 1980, inlcudes a summary of the percentages of males and females in the vocational teaching staff, local and state administration, as well as student enrollment, completions and placements in vocational progams and CETA programs.

Enrollments show an increase of females at the secondary level in 14 trade and industrial courses. Male enrollment at the secondary level has increased in health occupations, homemaking, industrial arts and business education. In postsecondary schools increasing female enrollments are shown in forestry, civil technician, electrical technician, electronics technician, electromechanical technician, and mechanical technician. Male enrollment at the postsecondary level has increased in practical nursing and nursing aide.

Hawaii

Several model programs and exemplary projects were developed at the secondary and postsecondary levels. Project participants received college credits, stipends, publicity, travel funds, and release time as incentives.

One community college developed a profile of sex inequities in the vocational program of their own campus and students participated in the project by collecting and analyzing data. Brochures were prepared to encourage female participation in male-dominated training programs and male participation in female-dominated programs. A video-tape of students and instructors discussing their successes in dealing with sex-role stereotyping has been produced. Large photographic display cubes were constructed and are on display in a community college career center.

A high school participated in a project identifying barriers to achieving sex equity and suggesting strategies to overcome these barriers. A statewide plan calls for the participation of all high schools in the state in an EGO (Equal Goals in Occupations) project within three years.

Special projects include the design of eight posters depicting men and women in nontraditional careers; workshops on each community college campus and a statewide workshop for secondary schools personnel to discuss strategies to achieve sex equity; a monthly newsletter informing schools about model projects, research reports and strategies to increase sex equity; and a directory of people in nontraditional careers.

The number of females enrolled in traditionally male-dominated programs, at the secondary level, has more than doubled between 1976-77 and 1978-79. Male enrollment in the traditionally female-dominated programs of clothing, food, and home management has increased by 53 percent. The community college system vocational enrollments show an increase of females in the two-year management program, mid-management merchandising, aeronautics techology, agriculture, graphic arts, carpentry, drafting technology and marine technology. There was an increase in male enrollment at the community college level in associate degree nursing and radiologic technology.

Idaho

Mini-grants were offered to LEA's for projects and programs designed to encourage men and women to enroll in courses considered nontraditional for their sex. The grants were in the amounts of $300, $400, and $1,000. The state has a set of standards for sex equity in vocational education that are supported at the state and local levels.

Special projects included a fourteen-hour sex equity program for counselors that was presented regionally; workshops on sex equity concepts in curriculum were presented to vocational instructors in secondary and postsecondary institutions; the sex equity coordinator conducted awareness workshops for outside interest groups (Department of Labor, AAUW, YWCA, League of Women Voters, Department of Ecology); a resource center for the LEA's which includes audio-visual materials, references and bibliographies was maintained; and reserch was completed to analyze student enrollment patterns in vocational programs, student perceptions, and salary and staffing patterns of faculty.

Illinois

Seventeen mini-grants were awarded to LEA's to support model or exemplary programs and activities to eliminate sex discrimination, sex bias and sex stereotyping in vocational education.

The Resource Center on Sex Equity produced a resource packet to assist LEA's in implementing staff development, continuation training and technical assistance activities. This project included a two-day training program for state staff and a four-day training of trainers program for a cadre of vocational educators.

One project identified and developed fair techniques for student recruitment in terms of sex, age, race and ethnic background that are to be used by high schools, area vocational centers and community colleges as they recruit students. Two projects targeting the needs of women are: an exemplary women's program that focuses on occupational development for community colleges, and a program for women in vocational education administration. In addition, a cement-mason's/laborer's apprentice training program was funded to train twenty women. This project was coordinated directly with the Cement Masons International Association, Local 90; and the Laborers International Union, Local 100. A curriculum provides classroom materials which create awareness and help eliminate sex bias, sex-role stereotyping and sex discrimination.

There has been an increase in the number of males enrolled in food services, recreation/tourism, associate degree nursing, practical nursing, medical assistant, health aide, food management/production services, other personal services and upholstering.

Examples of enrollment increases of females in nontraditional occupations are in three agriculture programs, five marketing and distribution programs, eleven technology and sixteen trade and industrial programs including fire-fighter training and law enforcement training.

Indiana

Projects for displaced homemakers include "Training Programs and Support Services Necessary to Meet the Needs of Displaced Homemakers: A Regional Model" and "Matching Displaced Homemakers with Vocational Opportunities—Support Services—Referral Agencies." "Gender, The Irrelevant Variable" is a guide for combatting sex bias with training for administrators and counselors. A component of sex equity is included in every workshop and inservice training program sponsored by the State Board. Twelve workshops were held in the summer of 1980 and over 1,000 handouts were disseminated at these meetings. The State Board facilitates a round-table forum that includes all social service agencies involved in providing services for displaced homemakers and other special groups and makes recommendations for future programs, services and activities.

Secondary female enrollments in agriculture have gradually increased each year by about 1 percent. Male enrollments at the secondary level in the health area have increased by 3 percent each year.

At the postsecondary level, the greatest gains in female enrollments are in agriculture production, horticulture and cooperative programs. Civil technology, industrial technology, auto mechanics, commercial art, photography, carpentry, construction and maintenance, supervisor, graphic arts, machine tool and welding also show positive gains at the postsecondary level.

Nontraditional enrollment increases for males are in health occupations and occupational home economics. Slight gains were in nursing, mental health technology, food management courses, care and guidance of children and cooperative programs.

At the adult level, females increased their participation in agriculture production, mechanics and horticulture. Males gained in occupational home economics.

Iowa

Local education agencies selected among the following projects to receive funding for sex equity projects: develop a model program promoting sex equity and encouraging nontraditional enrollment; develop, print and distribute local policy and procedure bulletins and booklets to reduce sex bias or sex-role stereotyping and encouraging nontraditional enrollments; conduct or provide staff development activities which are designed to reduce sex bias and sex-role stereotyping and encourage nontraditional enrollment; develop, print and distribute a wide variety of sex equitable media, print and nonprint to be used in recruiting students in nontraditional careers; develop awareness activities for employers designed to reduce sex bias and/or sex-role stereotyping as it relates to occupational placement; develop support services for students enrolled in nontraditional training programs.

Multi-cultural nonsexist state conferences for math/science, social studies, language arts and physical education and health were conducted. A simulation workshop on craftswomen in the schools was held by the Commission on the Status of Women in cooperation with sex equity coordinators in nine high schools across the state.

Area schools provide catalogs, brochures and guidances to students which are free of sex-role stereotyping and bias. "Promoting Sex Equity in the Classroom: A Resource for Teachers—Vocational and Technical Education" includes 12 modules which deal with eliminating sex stereotyping in programs and courses.

There is progress in nontraditional female enrollments at the secondary level in industrial marketing, agricultural products, and small engine repair. At the postsecondary level, there is an increase of males in hotel/lodging and in environmental health and of females in police science technology and machine shop. At the adult supplementary level, there is an increase of males in unholstery.

Kansas

Thirty sex-fairness packets contained instructions and visual aids to help vocational teachers achieve sex equity. "Expanding Student Options" is a handbook that was disseminated statewide. One special project was a Directory of Non-Traditional Workers. Another identified sex bias barrier to urban and rural employment. Sex-fair criteria for reviewing proposals were distributed and all projects and grants were reviewed for sex bias.

Displaced homemaker projects included identification of needs, a rural outreach model program, and special workshops for vocational educators serving displaced homemakers. A pilot multi-purpose center was established in 1981 to provide support services to displaced homemakers and other special groups.

Nontraditional female enrollments have increased in 15 programs that include body and fender repair, carpentry, small engine repair, diesel mechanics, machine shop, welding, and firefighter training. Male enrollments at the secondary level are increasing in home economics, office occupations, health occupations and cosmetology. In postsecondary programs, male enrollments have increased in most health technology programs, care and guidance of children, food management, office occupations, veterinarian assistance, and cosmetology.

Kentucky

Manuals were developed to provide sex equity strategies for vocational teachers, counselors and administrators. They included ideas on recruiting nontraditional students, sex-fair teaching techniques, checklists for evaluating materials and guidance tests, ideas on who should provide support services for nontraditional students, grievance procedures and several awareness and enforcement activities.

"The Coal Employment Project" is a model program to train women for entry-level coal mining occupations and how to cope in a field dominated by men. The course has 15 hours of orientation and 48 hours on safety in mining jobs.

Another project was done to increase nontraditional enrollments and provided cooperative vocational work experience for students. Coordination was done with the Bureau of Apprenticeship and Training, the Veteran's Administration, the Bureau of Manpower Services, the Bureau of Rehabilitation Services, job placement centers, prison staff, and the local news media.

Female nontraditional enrollments increased in 26 programs such as civil technology, natural resources, computing occupations, electronics and drafting. Male enrollments increased in clothing, food management, and institutional and home management.

Louisiana

"Change" is the appropriate name for a newsletter published by the sex equity coordinator's office. Materials developed by the office have been disseminated through an information booth at professional conferences and at the state fair. Included is information on a Speaker's Bureau and data on enrollment, placement, and compensation of students in cooperative work study verifying equity in the numbers of male and female students.

The sex equity coordinator participated in a TV talk show that reach 251,000 households. Public Service announcements on sex equity in vocational education were aired throughout the state on commercial and educational TV. Sex Equity Advisory Council meetings include officers of vocational student organizations.

A needs assessment was done on opportunities for women that resulted in a proect to help upper high school females become aware of opportunities in industrial arts. These young women were provided hands-on experiences in woodworking, carpentry, drafting and painting. Another vocational project was a displaced homemaker center.

Female enrollments have increased in 17 areas including forestry and scientific data, business machine maintenance, masonry, small engine repair, aviation occupations and blueprint reading. Male enrollments have increased in 12 areas as food distribution, personal services, health occupations and cosmetology.

Maine

Mini-grants were awarded that provided a range of sex equity activities including model sex equity programs, public service announcements and sex-fair brochures announcing vocational programs. A special project supports studies of programs that continue to represent low male or female enrollments.

Media was displayed at two fairs, as public service announcements on TV stations, and through a slide/tape presentation of male and female students in nontraditional vocational programs. Special efforts have been made to identify resource persons to promote sex equity concepts with local education agencies.

Project BEACON (Building Equity and Creating Options Now) was developed to promote sex equity among students and faculty. In 1981, vocational centers, regions and institutions were required to plan for recruitment of persons into nontraditional programs. A pre-vocational training program for displaced homemakers has been established in one vocational-technical institute.

The sex equity coordinator reviews affirmative action plans as they relate to employment hiring, firing and promotion.

Vocational institutes had an increase since 1977 in 12 vocational areas that would be considered nontraditional for women and in two programs considered nontraditional for men.

Maryland

A cooperative project with the Commission for Women called "New Directions for Women" has been funded since 1976. The major activity is a center for displaced homemakers which has provided support services to more than 4,000 women over 35 years old. Other activities include pre-training for females in nontraditional occupations, job development and training, conducting sex equity training programs for employers and community groups, training displaced homemakers to do sex equity workshops for high school students, and developing media and materials on sex equity.

Studies were done on the value and effects of vocational education and on student perceptions of counselors and counseling services. Both studies indicated the need for further research in sex equity.

Enrollment data shows an increase of female students in agriculture and trade and industrial programs. Male enrollments have increased in vocational home economics, consumer and homemaking, and business and office education.

There are approximately twice as many women nontraditional students in postsecondary programs as there are in secondary programs. It is projected that there would be 40 percent female enrollments in trade and industrial programs by 1982.

Massachusetts

All applications for vocational education funds submitted by local agencies include: a plan for recruiting nontraditional students; efforts for reducing sex bias; a commitment to review all materials for sex and ethnic stereotyping; and documentation of affirmative action employment practices.

The staff of each Regional Education Center have been trained to provide technical assistance on sex equity to local schools. In-service training funds for eliminating sex bias are available for local vocational educators.

Recent graduates of vocational programs have been instrumental in producing four booklets to inspire peer-support groups for students in nontraditional vocational areas. "Portraits" is a collection of character sketches of students in nontraditional programs. A guide was produced to help vocational educators develop ways to increase access to all programs for all students.

Eleven special programs for displaced homemakers provided outreach, assessment, counseling, skills training, placement, and follow-up. Emphasis was placed on non-stereotyped skills training such as electronics technology, word processing and metal fabrication.

The enrollment of females in vocational programs has increased over 20 percent since 1977. The greatest increase has been in the following order: technical education, agriculture and trade and industrial education.

Michigan

Grants were given to local agencies to field test a model placement program with a goal of increasing nontraditional job placements. Funds to develop sex equity materials went to 480 secondary schools and 29 community colleges. Additional dollars were awarded to plan and implement programs to recruit males and females into nontraditional programs and courses.

There are three displaced homemaker centers throughout the state, women's resource centers in 14 community colleges and 26 other agencies, and a tuition reimbursement program for displaced homemakers in 29 community colleges.

Secondary female nontraditional enrollments show an increase in agriculture and trade and industrial programs, particularly in electricity, drafting and graphic arts. Male enrollments have increased in medical lab assistant, dental assisting, nursing assistant aides, associate degree nursing and institutional home management.

The greatest increase of female nontraditional enrollment has been in graphic arts, carpentry, auto mechanics, electronics, aviation, and air conditioning. There are equal or balanced enrollments in horticulture, food distribution, general merchandise, food management, commercial art, and commercial photography.

Minnesota

Three projects aimed at helping displaced homemakers were developed. They consisted of an outreach program, inservice recruitment ideas, part-time training opportunities, resource materials, and a sound/slide presentation that explains the problems displaced homemakers face and offers solutions to these problems.

A survey of women in nontraditional vocational programs was done to determine the support needs of women. Project GATE (Growth in Agriculture Through Equality) encouraged career choices for women of all ages in agriculture and agri-business through a slide/cassette presentation and a handbook.

An organization of female apprentices called "Women In The Trades" was established and scholarships awarded to students in nontraditional programs at one vocational-technical institute. "Guide for the Student Seeking Information About Nontraditional Careers, Child Care, Community Services and Support Services" is a publication of one area VTI.

There has been an increase in male enrollment in health occupations, care and guidance of children, clerical, filing and records keeping, stenographer and secretarial-related programs. An increased female enrollment has occurred in agriculture supplies/service, logging, distribution and insurance, electricity technolgy, construction and maintenance trades, plumbing and pipefitting, custodial services, machine tool operator, welding and cutting, tool and diemaking, and small engine repair.

Mississippi

There are displaced homemaker centers at four junior college campuses in Mississippi and a CETA-funded project of $140,000 was awarded to expand the services of one junior college center. Each center has a full-time coordinator. The centers have a basic two-week program for students that includes self-assessment, understanding values and goals, communications, career decisions, career exploration, personal appearance, interview skills and application and resume preparation. Each center's coordinator works with state employment services on a continuing basis in order to locate jobs for students. Referral services are provided as well as outreach activities.

A poster contest was implemented in 1980 through the vocational guidance office. The first, second and third place winners were presented cash prizes at a special awards ceremony. The first place poster was printed for dissemination to all schools within the state.

Mississippi has had some shifts toward nontraditional enrollment for women at the secondary level in the following programs: agriculture products, ornamental horticulture, forestry, hotel/lodging, custodial services, electrical occupations and communications. Male enrollments that have increased at the secondary level were in automotive and institutional home management.

Postsecondary increases in women's enrollment were in animal science, inhalation therapy, accounting, nuclear technology, drafting, printing press, barbering and upholstering. Male enrollments at the postsecondary level were in food distribution, medical lab assistant and food services.

There were equal enrollments of 40 to 60 percent male or female in fiscal year 1979 at the secondary level in floristry, real estate, business data processing and home management, and equal enrollments of 40 to 60 percent male or female at the postsecondary level in general merchandise.

Missouri

In fiscal year 1980, six grants to overcome sex bias and sex stereotyping were issued and fourteen special incentive projects of overcoming sex bias and sex stereotyping were implemented. An audio-visual program aimed at attracting males in home economics was developed and a workshop was presented to increase awareness of opportunities for women in math and science-related fields.

Six displaced homemaker centers were funded out of vocational education and CETA funds. One of the well-known slide/tape presentationis "There is a Kangaroo in My Classroom" contains recruitment strategies to increase nontraditional enrollments. Public service spot announcements were televised and broadcast on radio; slide/tape presentations for recruiting students were produced in welding, health occupations. Titles included "It's Your right", "Oh, Yes You Can", "It's Time", "Men and Women in Office Occupations," and "Moving Up in Business—Rewards and Sacrifices."

Twenty-one programs showed a significant nontraditional enrollment change from 1976 to 1979. The programs with increased female enrollments were in agriculture supples/services, agriculture products, insurance, construction technician, custodial services, other metalworking occupations, and law enforcement training. Programs with a significant change in male enrollments are in floristry, dental assisting, comprehensive homemaking, child development, home furnishings, institutional home management, and personnel training/related.

Montana

Reimbursement for travel, lodging and per diem to attend training workshops; free resource materials, and mini-grant awards were among incentives offered to local school districts.

Radio spot announcements were produced including reports from the Superintendent of Public Instruction; three-day sex equity workshops were conducted in five sites; a survey was done to assess the needs of displaced homemakers and single heads of households which resulted in job readiness workshops and career/life planning workshops.

There has been an increase in women's enrollment in three nontraditional programs: agri-mechanics, electrical technology, and instrument maintenance repair. Male enrollments increased in five nontraditional programs: two in health occupations, two in business and office occupations, and one in comprehensive homemaking.

Nebraska

Numerous special activities and projects relating to sex equity in vocational education have been conducted. Packets entitled, "Free to Be," have been assembled and are being distributed to local vocational educators. Field trips were provided for students to view nontraditional occupations with orientation sessions before the trip and a follow-up survey after the project was completed.

"Women in Transition" was implemented with the help of the Nebraska legislture and the Nebraska Equal Opportunities for Displaced Homemakers Act and provided two centers for displaced homemakers. Center services included aptitude assessment, workshops on job readiness, job seeking and job retention, and referrals to community services training and placement programs.

There has been an increase of female enrollments in agriculture production, ornamental horticulture, industrial marketing, air conditioning, body and fender repair, commercial art, commercial photography and quantity food occupations.

Male enrollments have increased in filing, office machines, clerical occupations, clothing management and production, food management and production, clothing and textiles, family relations, food and nutrition, and home management.

Nevada

Incentives to encourage sex equity in vocational education include making funds available to LEA's to develop bias-free curriculum materials, recruitment procedures and materials, model programs and bias-free tests in vocational education.

Radio commercials for all occupational programs with emphasis on equal access were produced. A special project called, "Back to School, Back to Work," encouraged 30–50 year olds to return to school and enter nontraditional vocational programs.

School districts and community colleges were awarded mini-grants to assist in developing innovative techniques in increasing their efforts and promoting equal opportunities. A pamphlet called "Equal Vocational Education" was distributed to all vocational administrators, vocational teachers and counselors in secondary and postsecondary institutions.

New Hampshire

Discretionary funds have been provided to update data so that the management information system can include data on males and females, students and employers in vocational education. Grants are also offered to provide funds for teacher-education programs that encourage nontraditional students.

Special activities include workshops called "Tradeswoman" conducted by women already employed in nontraditional occupations. A booklet and slide/tape were completed called "New Approaches to Old Careers." A CETA-funded project, "Work Opportunities for Women" encourages women into nontraditional occupations. Guidelines have been developed for all personnel to follow when purchasing and using textbooks and other instructional materials.

There has been an increase of females in agriculture production, agricultural mechanics, general merchandise, accounting and computing, auto mechanics, carpentry, electricity, drafting, electrical occupations and graphic arts occupations.

There has been an increase of males in associate degree nursing, radiology technology and inhalation therapy.

New Jersey

Incentives to develop, expand and improve vocational education programs to eliminate sex-role stereotyping are provided to local education agencies. For example, fiscal support is offered to eliminate sex bias and stereotyping; inservice programs were given to administrators, teachers, counselors and agency personnel; curriculum guides were revised to be made bias free; special publicity was given to exemplary and model programs.

A project entitled "Overcome Sex-Role Stereotyping in Office Occupations" helps business and office educators teach sex fairness with students. "Electricity/Electronics Curriculum Develpment," examines career opportunities in the areas of electricity and electronics and includes the development of curriculum resource guides, recruitment brochures and inservice programs.

Enrollment showing an increase in females from 1972 to 1979 were: agriculture occupations, technical occupations and trade and industrial occupations. Males enrolled in increasing numbers in health occupations, occupational home economics, and business and office occupations.

New Mexico

A vocational equity center has been established which addresses educational equity issues for both females and males. Staff provides technical assistance, a resource library, printed and audio-visual materials, program planning assistance, and workshops for personnel from secondary and postsecondary institutions. A filmstrip entitled, "Changing," addresses the myths and stereotypes which prevent students from enrolling in nontraditional vocational training.

A statewide senior student essay contest, "How Stereotyping Can Affect My Career Choice," honored two students with plaques and $50 savings bonds. A women's resource center was funded in Albuquerque to develop and provide programs to assist clients through a series of life changes that occur from youth to adulthood.

The State Sex Equity Advisory Committee in conjunction with the state coordinator compiled and cataloged proposals submitted in other states for in a Sex Equity Proposal Exchange project.

There has been an increase in female enrollment in agriculture production, ornamental horticulture, mechanical occupations, construction and maintenance trades, petroleum, electronic technology, water and wastewater technology over a three-year period.

There has been an increase in male enrollment in health occupations, consumer and homemaking education and office occupations.

New York

A six credit university inservice course on sex equity for vocational educators trained over 225 vocational educators as change agents for facilitating sex equity. That group made over 56,000 contacts with students, teachers, and parents providing information on sex equity in vocational programs.

Two films developed in the sex equity coordinator's office received special recognition at a film festival. "Turning Points", is a documentary film depicting problems and experiences of women pursuing careers. "Men's Lives" concerns changing masculine roles.

A job network information service was established to find qualified nontraditional teachers and administrators. The service lists administrative job openings in LEA's and in state departments. Over 380 jobs had been advertised through early 1981 and a pool of over 500 qualified applicants is maintained.

There was an increase of 20 percent of women enrolled in agriculture programs from 1976–79; an increase of women in technical areas of 11 percent; and an increase in trades and industrial programs of 13 percent.

Men increased enrollment by 18 percent in home economics and by 2 percent in business and office programs.

North Carolina

Certificates of award and media coverage were given to 15 local education agencies doing an exemplary job of sex equity plans, inservice workshops and nontraditional enrollment changes. Special institutes trained 48 vocational educators to conduct local sex equity workshops. Plans to promote sex equity were a priority for 8 regional workshops.

A special project assessed business and industry's efforts and needs to provide opportunities for nontraditional employees. Newsletters on sex equity issues are disseminated quarterly. Information on women eligible to be vocational administrators has been made available for those interested.

"Work Options for Women" and "Wider Opportunities for Women" were programs that provided support services for women in nontraditional vocational areas and gave the women hands-on experience in 8 different trades.

Student organizations are promoting sex equity by encouraging both sexes to run for club office; stressing that membership is open to all vocational students; and by publicizing club activities with sex-fair pictures, posters and slides.

Female enrollments have increased in 18 secondary programs including forestry, appliance repair, millwright, diesel mechanics, and barbering. Post-secondary female enrollments have increased in 17 nontraditional programs. Nontraditional male enrollments have increased in 19 secondary areas in health occupations, consumer and homemaking and business occupations. Post-secondary male enrollments have increased in 10 nontraditional areas.

North Dakota

Mini grants were available to recipients of federal vocational funds that resulted in several model programs and projects. Equity workshops were done in eight regions throughout the state. Each workshop participant was committed to implementing a sex equity related activity in his/her own school. Following regional workshops, there were approximately 4,500 hours of inservice activities on sex equity in local school districts.

Filmstrips on equal access and opportunities were done for student organizations, special brochures were written on nontraditional courses and programs for women, and a Title IX brochure was cooperatively done by the Governor's Commission on the Status of Women and the Department of Public Instruction.

Nontraditional enrollment increases over a four-year period show a 9 percent increase of males in home economics programs; a 2 percent increase in number of males in office education; a 6 percent increase in females in agriculture; a 4 percent increase in females in technical education; and a 2 percent increase in trade and industrial education.

Ohio

Over 40 sex equity grants were awarded to LEA's to develop action plans and sex-fair materials. Three grants were given for graduate study in sex equity in vocational education. Twenty-six displaced homemaker centers were funded during 1981 with cooperative dollars from the Ohio Department of Education and CETA.

Each vocational education planning district and each vocational education service area has a sex equity plan of action that includes assurances on nine goals to achieve sex equity.

Projects have included a model for summer school experiences in nontraditional programs; a pre-vocational curriculum model to eliminate sex barriers in career decision-making; a recruitment, retention and placement model; and a newsletter dissemination service for sex equity information reaches 10,000 state educators. In 1979, 43 percent of all women enrolled in vocational education were in short-term adult courses.

From 1972 to 1979, the percent of women in nontraditional programs doubled from 5.5 percent to 10.8 percent. In nontraditional agriculture and distributive education programs, the percent nearly tripled. Women's enrollment has appreciably increased in all areas, particularly in 11 technical programs and 16 trade and industrial programs. Men's enrollment has increased in 11 nontraditional programs. Included are floristry, home economics useful, bank teller and general office programs.

Oklahoma

A model program for adult students provided exploratory work experiences in nontraditional occupations, supported these students to get into nontraditional training programs, and provided placement services. There were 275 students involved. Employers in the area were contacted for prospective work experience stations.

Child-care referral services are provided by the State Department of Vocational-Technical Education and in area vocational schools. The State Advisory Council on Vocational Education funded "Sex Bias Barriers to Vocational Education Enrollment," a research project. A member of the vocational education equity staff serves on a state department of vocational-technical education salary review committee. "Futures Unlimited" is a slide/tape program for students, staff and community groups.

Services for displaced homemakers show that 43 percent of those going through one program were placed in jobs. Three rural displaced homemaker programs are cooperatively provided with funds from the State Department of Vocational-Technical Education, the State Department of Economic and Community Affairs and the regional office of the Department of Labor.

Nontraditional enrollments for females show an increase in 24 programs including 5 in agriculture, transportation, appliance repair, sheet metal, welding and small engine repair. There was an increase in 10 nontraditional programs for males with the major increases in the health occupations.

Oregon

A telephone education program was provided for displaced homemakers, single parents, part-time workers, and handicapped persons who need to improve their job skills. Lessons in business, math, and basic skills were produced on cassette tapes to be played over the telephone. Each student had an accompanying workbook. Instructors visited the students' homes at least every two weeks to monitor programs and administer tests.

"Balancing Vocational Opportunities" included an attitudinal survey toward sex-role stereotyping, provided workshops, developed materials, and trained a cadre of vocational educators in the elimination of sex bias. Female enrollments increased in marketing, metals, drafting, graphics and forestry and male enrollments increased in secretarial and child care clusters as a result of the project.

Special projects provide exploratory experiences, support services, and cooperative work experiences for women in nontraditional vocational-technical areas. Other programs work with college and community resources to find jobs in private industry for women who are economically disadvantaged, unemployed and underemployed. There were 8 displaced homemaker projects, 13 support services for women, and 13 nontraditional roles and re-entry programs. The Department of Labor, CETA, Women's Education Equity Act, National Science Foundation, Urban League, Kellogg Foundation, Associated General Contractors, and the State Highway Department all participated in funding sex equity projects.

Pennsylvania

Schools are encouraged to involve parents and the community in achieving sex equity. The Department of Education endorses the principle of sex equity and encourages schools to educate students in a sex-fair manner.

Projects include a directory of nontraditional workers, a sex-fair career day guide, implementation of sex-fair career days, and a statewide sex-fair counseling workshop. "Vocational Education for a Changing World" is a multi-media presentation for community and school organizations on the changing roles of men and women in the workforce. The intent is to assist children to base their career decisions on interest and ability and to promote nontraditional careers.

There has been an increase in female enrollments in 51 programs considered nontraditional for that sex with the greatest number in 30 trade and industrial areas. Nontraditional enrollments for men have increased in the areas of dental assisting, dental lab technician, medical lab assistant, medical assistant, clothing and textiles, childcare and guidance, clothing management and general clerical.

Puerto Rico

Five regional supervisors were trained to give technical assistance to 11 vocational education personnel to place women in nontraditional programs. Goals were to increase the enrollment of women by 1 percent in agriculture, 32 percent in technical education, 2 percent in industrial arts, and 3 percent in vocational industrial occupations. Male enrollments are projected to increase 1 percent in health occupations, 2 percent in office occupations, and 2 percent in consumer education.

Sex equity workshops are developed with technical teaching materials in the Spanish language. School directors are promoting women in nontraditional vocational training through the media, workshops, and staff development.

Women's enrollment in nontraditional programs has increased from 1977-79 in two agriculture programs, three distributive education programs, seven technical education programs and nine trade and industrial programs. Men's enrollment over that same period in nontraditional programs increased in one health occupation, four consumer and homemaking programs and three office occupations programs.

The overall enrollments of female by division for this period were: increases in agriculture from 4 percent to 10 percent; increases in trade and industry from 23 percent to 26 percent; increases in technical education from 8 percent to 18 percent. Male enrollments in home economics increased from 14 percent to 19 percent and in health occupations from 11 percent to 14 percent.

Rhode Island

Rhode Island College has a three-credit course on the exploration of sex roles in vocational education that is recommended for all students majoring in vocational education. A pilot project to acquaint parents with issues related to sex equity was conducted. Its aim was to encourage parents to help their children explore nontraditional vocational opportunities.

A joint project between the Bureau of Vocational-Technical Education and the Associated General Contractors of Rhode Island resulted in a job information fair to acquaint women with job and apprenticeship opportunities in construction. Approximately 350 women attended.

There have been increased female enrollments in agriculture production, accounting and computer occupations, environmental control technology, machine shop, law enforcement, electronic technology, fire and fire safety technology.

There have been increased male enrollments in horticulture, nurse assistant, homemaking, dental assistant, medical lab assistant, stenography, practical nurse, and secretarial occupations.

South Carolina

Several special projects were devised to encourage women into nontraditional programs. "Entrys" (Engineering, Technology Resources for Young Female Students), was designed to reach female high school students who have an interest in math and science. "Exploratory Assistance Programs for Females in Welding" was designed to provide occupational information to females regarding opportunities in the welding trades.

Public service announcements went to 12 major TV stations and nearly $15,000 worth of free air time was granted.

There has been an 8 percent increase in female enrollment in Agriculture, 2 percent in T&I, and 6 percent in Industrial Arts. An increase of enrollment for males shows 5 percent in consumer and homemaking, 4 percent in occupational homemaking, and 3 percent in business and office occupations.

South Dakota

A film entitled "Freedom Through Access" was produced and used extensively in special mini-conferences. Access is an acronym for "Ascertaining Career Choices While Liminating Sex Stereotypes." A youth cartoon contest, "Sex Equity in Today's Life" was coordinated by the Sex Equity Coordinator and vocational youth groups. Winning cartoons will be reprinted and distributed as posters around the state.

Programs with increased female enrollments are agriculture production, agricultural mechanics, machine shop, radio and TV production, auto parts management, and drafting.

Males are enrolling in nurse assistant, consumer and homemaking, care and guidance of children, office machines, clerical occupations, and dental lab technology.

Tennessee

The Sex Equity Coordinator works with the State Advisory Council in all areas of vocational education. The coordinator also cooperates with the presidents of technical institutes, the Commission on the Status of Women, the NAACP and the YMCA.

Curriculum materials were updated to eliminate references to sex-role portrayals in Ornamental Horticulture, Marketing I, Practical Nursing, Family Living, Transportation, Business Data Processing and Automotive Mechanics.

All vocational programs were reviewed for progress in sex equity. Written responses and recommendations were made for 477 secondary programs, 47 adult programs, and 30 postsecondary programs. Approximately 60,000 students were represented. Enrollments show increases in female nontraditional students in agriculture, industrial arts, technical (48 percent), and trade and industrial education. Male enrollments have increased in health occupations, occupational homemaking and office occupations.

Texas

The Texas Education Agency funded a video-cassette program named "Break Out" as a recruitment tool to bring nontraditional role models to students. A study entitled "An Analysis of Problems as Perceived by Male Students in Vocational Homemaking," will result in improved teaching techniques or curriculum development.

Apprenticeship advisory board members produced posters of women in nontraditional roles as a means of recruiting more women in apprenticeship programs. Over 500 posters were distributed to vocational counselors and placement offices.

Sex-fair brochures on secondary vocational education programs were designed and used for student recruitment by local school districts. Forty-six thousand brochures have been printed and disseminated to both female and male students.

There has been a 2 percent increase of males in health occupations and a 7 percent increase of males in homemaking education. Since 1976, female participation in nontraditional industrial education has grown from 2 percent to 16 percent.

Utah

The sex equity coordinator reviews all guidelines, checklists and evaluation instruments used by the division of vocational education for possible bias and stereotyping. A nondiscrimination statement is included in all curriculum materials and documents disseminated through the vocational education division.

A four-year project on vocational opportunities through equity (Project VOTE) consists of strategies to assist vocational educators in decreasing sex stereotyping in courses and on student career selection. Twenty local agencies are participating in the four stages of development, field testing, implementation and dissemination. Learning modules being tested are: (1) Support Yourself, (2) Career Conversation, (3) Looking Out for Life, (4) Equity Ideas, and (5) Opening Doors to Nontraditional Employment.

Leadership training in sex equity is provided to vocational directors and at least one person from each local agency who will serve as liaison to the director on equity issues.

Vermont

A TV program called "Across the Fence" highlights special projects which are being offered to overcome sex stereotyping. Newspaper coverage is given to exceptional programs and letters of commendation are sent to school districts demonstrating exceptional sex equity efforts.

Projects have been funded to orient high school personnel to opportunities for women in technical careers. Workshops have been designed to deal with student attitudes. A media presentation was developed to encourage students to explore nontraditional career options.

There has been an increase in female enrollments over a three-year period in agricultue production, ornamental horticulture, accounting and computing occupations, commercial art occupations, graphics art occupations and quantity foods occupations. There have been increased male enrollments in practical nursing, and care and guidance of children.

Virginia

Three projects for displaced homemakers were funded by the vocational sex equity office. One was a workshop to prepare vocational home economics teachers with the skills needed to work with displaced homemakers. A second project provided internships and two seminars to prepare displaced homemakers for entry into the job market. The third was a project called "Preparation for Employment for Displaced Homemakers" in which 20 persons were provided job search skills and individual counseling.

A slide/tape presentation for use in recruiting students, "Business and Office Education Recruitment Materials" was developed and field tested in August, 1980. "Encouraging Sex Equity in Home Economics" was done to attract males into home economics programs.

Virginia's program enrollments for 1978–79 show more women entering programs in agriculture, industrial arts and trade and industrial education. Men are increasing in numbers in health occupations and home economics.

Washington

The State Board for Community College Education elected to provide 3 percent of their basic grant for displaced homemaker programs and 2 percent for support services for women for three years. As a result, there are special services, programs or centers for women and displaced homemakers in 27 community colleges.

Several sex equity oriented program improvement and disadvantaged projects were funded through the Research Coordinating Unit. "New Career Horizons" is a rural outreach program that provides problem solving, job training and job placement to unemployed, disadvantaged, single heads of households. A nontraditional career information and counseling center provides recruitment, referral, training and placement of men and women in nontraditional occupations.

"Dial Women" is a toll-free telephone service for rural women needing advice and assistance in finding vocational training and job opportunities. Another project provides job-seeking skills for victims of domestic violence. A three-day conference for 11 Western states for women in fire service was sponsored by the State Commission for Vocational Education and the U.S. Fire Administration.

Male enrollments in nontraditional vocational programs have increased in 18 areas and female enrollments have increased in 51 programs including 23 in trade and industrial education programs.

West Virginia

Dollars were provided for grants to support activities to overcome sex bias and sex stereotyping and for support services for women. Priorities of those projects were nontraditional recruiting programs, sex-fair materials development, attitudes toward nontraditional occupations, and vocational exploration in nontraditional areas.

One project trained counselors to assist girls in choosing career and a local project helped counselors, administrators and teachers overcome sex stereotyping. Two career awareness programs for women presented a realistic view of nontraditional occupations. A directory of workers employed in nontraditional occupations was development.

Each local agency was required to develop and implement a plan for the elimination of sex bias and stereotyping in vocational education. The local plan also met the federal guidelines for having appropriate representation of males, females, minorities and handicapped persons on advisory councils.

Reports indicate an increase in nontraditional female enrollments in 11 programs and an increase in male nontraditional enrollments in 9 programs.

Wisconsin

An incentive system provided extra reimbursement points to school districts that did a sex equity needs assessment, developed and implemented an action plan, and provided a related staff training program. Over half of the 286 secondary school districts participated. Postsecondary funding incentives encouraged women's centers, special services for nontraditional students, and displaced homemaker services.

Among special activities were an awareness campaign for parents to encourage children to consider nontraditional vocational programs; handbooks for promoting sex equity; a booklet highlighting twelve nontraditional students; materials used by counselors, teachers, community organizations, and CETA program directors; and needs assessment instruments and plans for postsecondary districts to develop displaced homemaker service centers.

The Governor proclaimed "Pioneering Through Vocational Education Month" in October of 1979 and special efforts were made to encourage nontraditional enrollments. The Resource Center on Sex Equity trained 35 vocational educators to serve their local regions. A bimonthly equity newsletter and a monthly job opportunities bulletin were part of the sex equity coordinator's tasks.

The nontraditional enrollment summary shows an increase of males in eight home economics areas and five business occupational programs. There were significant increases of women in agriculture, industrial education, graphic arts, plastics, and construction.

Wyoming

Special efforts were made to help vocational student organizations understand equal vocational education opportunities. The state awarded five grants to develop model sex equity programs in local agencies. A videotaped program on women in nontraditional roles was created and an A-V recruitment package provided encouragement for women in construction technology.

A survey was done to discover barriers to vocational education services and employment in rural parts of the state and included a needs assessment in a six-county area. Another project provides guidance in making career decisions and employability skills to single heads of households, persons who are currently homemakers seeking employment, part-time workers who wish to secure full-time jobs, and displaced homemakers.

Two workshops per year are provided for state staff and university staff who use materials for eliminating sex bias. Four regional workshops are provided each year for teachers, administrators, and parents on eliminating sex bias.

Compiled by: Ms. Beverly Postelwaite, Special Assistant, Commission for Vocational Education, State of Washington.

PREPARED STATEMENT OF BARBARA SEGAL, OUTREACH COORDINATOR, MOHEGAN COMMUNITY COLLEGE, NORWICH, CONN.

In presenting this written testimony to support the continuation and expansion of federal support for displaced homemaker non-traditional job-training programs and support services, I must emphasize that the plight of the displaced homemaker today is a problem of national magnitude demanding a comprehensive, federal and state coordinated response.

A quick review of recent statistics makes the reason for this immediately apparent. In a New York Times magazine article published on July 6, 1980, entitled "Work begins at 35", writer Emily Greenspan indicated that one of every three currently married women will eventually divorce and only 14 percent of divorced women are granted alimony. Greenspan cited staggering figures culled from a 1979 study by the United States Department of Labor Women's Bureau that conservatively estimated that there are at least four million displaced homemakers in America and most of them do not qualify for welfare, unemployment benefits or other "safety net" supports.

Added to these statistics is the harsh recognition that America's traditional social, cultural, economic and educational systems never prepared, nor were they intended to prepare women for their emergent role as wage earners and single heads of households.

Without a consistent, ongoing and strong federal response to the problems of displaced homemakers who must reenter the labor market to support themselves and their children, more and more adult women will be condemned to marginal levels of existence that threaten to drain already limited social and economic support systems and resources.

As the director of a displaced homemaker non-traditional training program conducted by Mohegan Community College in Norwich, Connecticut 1980–81, I would like to offer testimony on the nature of the program and its results. The program was designed to prepare women for entry-level jobs in the machine trades. Underlying the design was the fact that 80 percent of all working women are concentrated in just 20 occupational categories such as clerical work that historically pays significantly less than jobs in traditionally male-dominated fields.

Furthermore, Eastern Connecticut as well as the entire state had experienced a shortage of machinists that adversely affected private industries' ability to produce the machinery that has made Connecticut a leader nationwide. By training women for jobs in the machine trades, this program addressed complementary objectives: 1. Women would acquire the skills to obtain jobs with advancement opportunities and pay scales at significantly higher levels than those in typically females jobs and; 2. Private industries would have access to an expanded pool of qualified workers.

The funding for this program was provided by the State Department of Education through federal funds made available under Public Law 94–482. Thirty-four adult women ranging in age from 22 to 54 participated in the training program. Nine were divorced, four were separated, one was widowed and one was a single parent. Among them were fifty dependent children.

The participants received 140 hours of classroom instruction at no cost to themselves in the following areas: Blueprint Reading, Machine Shop Math, Manufacturing Materials and Processes, Metrology and Machine Shop Theory and Orientation. In addition to the classroom instruction, the program provided support services and counseling designed to strengthen job hunting skills and employment activities. Thirty women successfully completed the 140 hour program.

According to the most recent followup survey conducted by telephone on November 16, 1981, the program has achieved its primary objectives. With twenty-seven women responding to the survey, the following data was collected:

Nine women are currently employed in occupations directly related to the training program.

One women is currently employed in a non-traditional job indirectly related to the program.

Two women are employed but not as a result of the training program.

Four women have entered more advanced non-traditional technical training programs as a result of the program.

Eleven women are currently unemployed or not seeking employment due to medical, health or family reasons.

Three women did not respond to the telephone survey.

In summary, more than 50 percent of those responding to the survey are currently reentering the world of work or education with the skills and confidence needed to compete for non-traditional jobs that will enable them to obtain real economic independence.

The following are specific examples of the types of employment or advanced training the women have obtained.

Kathy B. is a vinyl mechanic for a large sub-contracting firm in the region. She is earning $5.50 per hour and is using her blueprint reading and metrology skills daily.

Sharon B. is an assistant manager of a popular fast-food restaurant. She attributes her recent promotion to the training program.

Deborah F. is enrolled at a state technical college.

Dorothy B. is enrolled as a full-time drafting student at a state technical college.

Betty M. is a fine finishing machinist for a precision tool company. She earns $3.75 per hour with advancement opportunities.

Carol R. is enrolled in a pipe hanger training program for a major submarine building firm in Eastern Connecticut. She was accepted into the program because of her blueprint reading and shop math background. She is now earning $4.60 per hour. Once the on-the-job training is completed, she will be earning $4.80 per hour.

Diane S. is a Production Manager for a company producing parts for railroads. She is earning $4.50 per hour with a raise expected in 30 days.

A review of the statistics and the personal case histories cited above clearly indicates the value of non-traditional training programs for women. This country can and must continue to provide the funding and resources necessary to enable women to gain control of their lives as productive and valued human beings.

In concluding this written testimony, I respectfully urge Congress to continue and expand its support for programs that address the pressing needs of more than half of our adult population.

PREPARED STATEMENT OF RITA LAROM, DIRECTOR, CENTER FOR NEW DIRECTIONS, COLLEGE OF SOUTHERN IDAHO, TWIN FALLS, IDAHO

Mr. Chairman and members of the committee, as the Director of a "displaced homemakers" program in rural southcentral Idaho, I urge your support of sex equity as it relates to the Vocational Education Act.

We do know:

(1) Nearly two-thirds of all women in the labor force work because of economic need. They are single, widowed, divorced, separated, or have husbands whose earnings are less than $10,000.[1]

(2) Eighty percent of women workers are to be found in low paying, dead-end jobs.[2]

(3) Women, as a group, earn about three-fifths of the wages men receive.[1]

(4) One in every seven families has a woman as the sole provider.[1]

(5) Of all poor families, half have a woman as the sole provider.[1]

Divorces continue at a high rate.

More and more children are raised in single parent homes with less than one-fourth of them receiving regular child support.

Frequently, women are widowed without adequate funds for living expenses and the skills for acquiring work.

The life span is lengthening but women continue to outlive men by several years.

Technology changes rapidly so employees lose their jobs, especially those in unskilled, low paid positions often held by women.

We are also aware that the job market is highly competitive and that industry need productive, motivated, highly skilled employees. Vocational Education provides a needed service to a society and its individuals caught up with these concerns. We can congratulate ourselves that current sex equity programs in Vocational Education have accomplished as much as they have in advancing opportunity and employment for women. However, the earning gap between men and women continues to widen. Increasing numbers of women at both ends of the age range are attempting to enter the job market without training and without skills. It is apparent that true sex equity and opportunity must become a reality.

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[1] U.S. Department of Labor (1980).

[2] National Commission of Working Women (1981).

From my experience in working the problems facing the displaced homemaker, I find, for example, that widowhood and divorce after many years of marriage are leaving the homemaker in an extremely vulnerable position as she attempts to change her lifestyle and become self supporting. Because of lack of experience, she becomes discouraged very easily and considers herself too old to to compete in the job market or she concludes there are no jobs. At this time, it is very easy for her to surrender to her discouragement, stop looking for work, and begin to rely on public or family assistance. Intervention, at this time, often means the difference between here becoming a contributing member of society or ending up as a long term recipient of public funds. A report by the National Advisory Council on Economic Opportunity stated, "The 'feminization of poverty' has become one of the most compelling social facts of the decade." At the present rate, it added, "The poverty population will be composed (primarily) of women and their children by about the year 2000."

In addition, recommendations for the 1981 White House Conference on Aging urged the support of traditional and non-traditional continuing education for older Americans. It is essential if they are to deal with such basic needs as financial security, physical and mental health and general social well-being. Those who do participate in the educational offerings "tend to be those who are already advantaged, educationally and economically," while "the vast majority of those most in need are still unreached."

Reaching those people is vital to the economy and well-being of our society. Insecurity prevents them from entering an unknown and potentially threatening classroom situation. Sex equity programs can make contact with these individuals, familiarize the potential student before such classes begin and therefore, increase the chances of success.

One way to provide for the financial autonomy of the individual and to assure that one won't be below the poverty level simply because of sex, is to gain a distribution of the sexes throughout the work force. The employ of women in traditional high pay male vocations and the employ of men in traditional female jobs, tends to upgrade the work conditions and even the pay scale for all. Sex equity programs assist in the physical and psychological adaptation of the prospective trainee and employee to help assure their chances of success.

Biases still exist with teachers and employers. A thirty-nine year old female auto mechanic student was considered by an administrator to have a "real handicap." A CETA supported student was told by her future drafting instructor that she didn't "look like one of those." Sex equity programs must continue to increase the awareness of faculty and staff to help develop the student's chances for success.

However, simply filling a slot in a classroom and/or finding a job for the hopeful employee is of little avail, if that person quits. Success can only be measured by continuation or completion.

The factors involved in returning a person to the job market after work as a homemaker, are diverse and complex. Usually she returns because of need, probably the loss of spousal support. She is probably attempting to cope with: (1) Grief from loss of a relationship. (2) Financial concerns—sometimes severe. (3) Lack of self-confidence and self-esteem. (4) Shortage or lack of job skills and/or experience. (5) Often the need to support dependent children. (6) Lack of knowledge and competence in job seeking techniques. (7) Prejudices regarding sex and/or age.

All of the above concerns must be dealt with before adequate energies can be applied to training and work. Sex equity and displaced homemaker programs provide referrals to essential services and, more importantly, develop the self-confidence, independent living skills, and job readiness necessary for successful transition of the individual to a sustained and useful position in society.

In our program, during one year's time, the following occurred: Forty percent increase in employment rate. Thirty-eight percent increase in number of participants involved in training. Twelve percent increase in pay raises on the job.

This statisitical evidence of the program's success can be and has been repeated in similar efforts throughout the country.

However, now is not the time to stop. The momemtum has only begun and must be kept going. A study by the National Commission on Working Women predicts that the number of women between the ages of 45 and 54 in the work force will increase by fifty percent in the next two decades. There is still so much to be accomplished in the area of training women to enter or reenter the job market, and to provide industry with this immensely valuable resource, that the inclusion of provisions for sex equity and displaced homemakers in the Vocational Education Act is essential.

In a society where we value mother and wife, we must continue to support that person when her role is completed. Assisting her return to employment and society could be equated to the soldier returning from military service. I am sure all of us would concur her contribution has been at least as valuable. Since we are also a society concerned about the full development and constructive utilization of its citzenry, we can ill afford to lose some of our unknown and untried potential of intellect and skills simply because of sex and/or age.

Therefore, I urge you to support full funding for sex equity and displaced homemakers programs in Vocational Education as a high priority mandate.

State of New Hampshire,
Department of Education,
Concord, N.H., November 18, 1981.

Representative Carl D. Perkins,
Chairman, House of Representatives, Committee on Education and Labor, House of Representatives, Washington, D.C.

Dear Representative Perkins: I strongly object to OVAE's proposed changes to eliminate the sex equity legislative provisions of the Vocational Education Amendments of 1976. Without the efforts of a full-time sex equity coordinator, Vocational Education will continue to sex-role stereotype women into low paying and low esteemed female intensive occupational areas. This will cause further erosion of human potential and continue to increase the number of poor in the United States.

Presently, the ratio of poor is three out of five are women.

Thank you for your consideration in this matter.

Sincerely,

Dr. Nishma Duffy,
Equal Access Consultant.

Coalition for Equal Vocational Opportunity,
Cleveland, Ohio, December 15, 1981.

Hon. Carl Perkins,
U.S. House of Representatives,
Washington, D.C.

Dear Hon. Perkins: We are a group of individuals and organizations working to improve the economic status of women and minorities. we have joined together in the Coalition for Equal Vocational Opportunity in order to help promote equitable vocational education in public schools.

As you are no doubt aware, the poverty population is becoming increasingly "Feminine". The National Advisory council on Economic Opportunity has predicted that, "the poverty population will be composed solely of women and their children by about the year 2000."

The perpetuation of sex stereotypes in vocational education contributes to the likelihood that this prediction will come true. In Ohio, for example, more than one quarter of female students enrolled in vocational programs in 1978–80 were in Business and Office courses; the median pay for clerical workers in 1978 was $8,440. Even more disturbing is the finding that over one-half of the female vocational students that year were in home economics classes; of these, perhaps 1 percent were being occupationally trained.

Males on the other hand were clustered in the Technical/Trade and Industry areas. Over half the male vocational students were in such programs. The median income for male craft workers was $14,837. Thus female students are dramatically over-represented in the programs that lead to low paying jobs or unemployment.

We believe that as a nation we cannot ignore these figures. Using vocational education monies to impact on sex stereotyping is an important way to promote the country's interest in alleviating poverty.

We therefore encourage you to maintain and improve the sex equity provisions of the Vocational Education Amendments. Specifically, we recommend that:

1. The $50,000 expenditure for full-time personnel be maintained.
2. Incentive grants for local programs should be mandatory instead of permissive.
3. Funding of child-care programs should be mandatory.
4. Planning requirements should be maintained. Although planning represents a major undertaking for the state and involves much paper/work, studies have shown

that where planning is good, progress has been made toward sex equity. (National Advisory Council on Vocational Education, December 1980 report, Increasing Sex Equity.)

5. Funds should be targeted toward economically depressed areas, where students are most in need of job training.

6. Local schools and vocational planning districts should be permitted to expend funds to provide Career Education to parents as well as students. Parents, made aware of current labor market trends, can help to encourage their children to take a nonstereotyped look at all career options.

We would like to encourage you to attend the House Subcommittee on Elementary, Secondary, and Vocational Education hearings on December 16th and 17th to get more information on these issues.

Thank you for your consideration.

Sincerely,

Coalition for Equal Vocational Opportunity.

Patricia Fox, Westlake, Ohio; Janie Rollins, Title IX Coordinator, Cleveland Public Schools; Eileen Roberts, Executive Director, American Civil Liberties Union of Cleveland; Elisabeth Dreyfuss, Cleveland Marshall College of Law;[1] Phyllis Benjamin, Title IX Coordinator, Clevaland Heights—University Heights City School District; Amy Schuman, Program Director, Women In Skilled Employment.

OCCUPATIONAL EDUCATION PLANNING,
REGION TEN,
Batavia, N.Y., January 7, 1982.

To Hon. CARL D. PERKINS,
Chairman, House Subcommittee on Elementary/Secondary and Vocational Education, Washington, D.C.

From JUNE HUBNER,
Occupational Equity Project Director, New York State, Region 10, Fairport, N.Y.

I have been informed by Congressman Conable's office that the Hearings on Sex Equity in Vocational Education were held on December 16th and 17th. I am sorry I did not know this sooner. I have been assured that you will accept written testimoney up to, and including, January 11, 1982. In this written testimony I will cover three significant areas of progress in Region 10; Awareness, Involvement and Attitudes. My personal observations will summarize the status of Sex Equity in Vocational Education in the schools I service through this project as part of a network in New York State.

AWARENESS

With the inception of the VEA Amendment, Monroe BOCES No. 1 was one of the first districts to receive a VEA grant as a catalyst for an awareness program. Vocational education staff members, district guidance counselors and other teaching staff attended workshops to develop awareness about Sex Equity information was disseminated throughout the 10 district service area and curriculum was reviewed with changes being made where the curriculum appeared to be sex biased or discriminatory. Self evaluation of staff attitudes led to open dialogues with students about non-traditional roles and opportunities in vocational education.

The following year district personnel from the 10 school districts participated in workshops and training sessions. They developed action plans about sex equity to use during the school year with their students.

The third year was highlighted by a Non-traditional Career Exposition, called "Career Choices in a Changing World," featuring non-traditional role models, exhibits and career information. One hundred and twenty five exhibits, sponsored by Industry and BOCES, at the Monroe County Dome area attracted 9,000 students, teachers, parents and other interested persons from the greater Rochester area.

The current year (1981-82) has been one filled with providing technical assistance developing action plans sharing resource materials, identifying role models, conducting workshops, providing referral services and giving general program support to 57 school districts and 5 BOCES Centers in "Region 10", a Western New York region served by Representatives Conable and Horton.

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[1] Given for identification purposes only.

INVOLVEMENT

From a small beginning in 1976 to the present time, involvement in promoting sex equity in vocational education has grown in this part of New York State. Sometimes the distance from Albany determines the degree of involvement in new projects, ideas, mandates and legislation. This has not been the case with Sex Equity. The everwidening interest and involvement in vocational education programs indicated an interest in accepting the principles of equality. Yet there are some significant factors to be considered. More women are entering the work force. More women are raising children alone or are living alone. They are in need of equitable pay for their equal efforts in the labor force. New York State has outstanding leadership in the field of Sex Equity with Carol Jabonaski and Mary Ann Etu serving as Sex Equity Coordinators. In the Region 10 area of New York staff involvement has been marked by an average of 75 percent of staff members following through with their developed plans for action. More students are making non-traditional career choices. More graduates are going on to technical and non-traditional training in higher education. Nine thousand people attending a Non-traditional Career Exposition indicates motivation for involvement when less than 3,000 people were expected.

There are many other plus factors (too numerous to list at this time) which indicate a growing positive attitude toward Sex Equity in vocational training programs and subsequent employment. Industry representatives are encouraging vocational schools to train more women in the trades. They report that women in the non-traditional work forces are "more careful, have a better safety average, and are generally very valuable resources." Vocational school staff members, once resistant to the idea of women students, have equally positive comments about them now. On the other hand, young men in Child Care and Nursing programs are being accepted by teachers, other students and the work world without bias or discrimination.

Not all attitudes have changed that readily. Some parents and some school personnel appear resistant to the idea of non-traditional career choices being appropriate carrer alternatives. Some staff members still find it difficult to change unconscious discriminatory practices. Overall, attitudes are changing. Progress is being made. But it takes time to develop a structured effort which will insure equal opportunities for both young men and young women in their personal career choices. In New York State a firm foundation, based on solid and meaningful goals, has been laid for that purpose by some very dedicated and capable people. It will grow and become more valuable with time if it is allowed to be an intregal part of Vocational Education.

PERSONAL OBSERVATIONS

My background in Special Education and Education Administration has prepared me to see both sides of the issue in discrimination and the limitation of programs. I can understand your concerns about Sex Equity.

When I was asked in 1977 to assume responsibility for the Sex Equity Project I was very willing to do so. As I have worked with the project I have learned much about the 1976 VEA Amendment and its usefulness. I have observed what happened prior to the amendment and what is now happening because of it. "Now" is better than "prior". Every person educated in this country should have the opportunity to choose his or her career path without regard for a person's gender. Organization, decision making, communicating, planning, forecasting, leadership and other skills are not the unique domain of one sex or another. Neither are creativity or motivation. Yet these are the skills used to prepare for a vocation. It is reasonable that a course of study, just like a set of skills, should not be closed to a person because of one's sex role if skills, and the ability to learn a given set of instructions ultimately become the determiners of success in the work world.

As a member of the Advisory Board for the "Women in the Trades" organization I have noticed a growing number of women persuing their interests in the trades. This could not have happened very readily without Sex Equity in vocational education which has been a catalyst for many positive changes in Occupational Education. Should the structure be removed the changes might not remain.

Americanization of a family requires the growth of at least one generation. It is likely the provision of equal opportunities in vocational education will also take time and organized effort. Good things are happening but positive changes do take time.

It is my hope that your committee will take into consideration all progress when making the decisions which have to be made. One reason our Country became great is because leaders were active and far-sighted. Recognizing that equal educational opportunity should be the right of every citizen, and acting upon that recognition to maintain a fresh dynamic positive force in education, such as Sex Equity Coordinators, will expand the greatness of today and insure equal educational and vocational opportunities for the children of tomorrow.

JUNE HUBNER.

NONTRADITIONAL CAREER EXPO—MONROE COUNTY, N.Y., NOVEMBER 1980

PROJECT ON EQUAL EDUCATION RIGHTS,
Washington, D.C., January 14, 1982.

Hon. CARL PERKINS,
Chairman, Subcommittee on Elementary, Secondary, and Vocational Education, House of Representatives, Washington, D.C.

DEAR CHAIRMAN PERKINS: Thank you for giving us the opportunity to present our views on the importance of sex equity in vocational education.

Elizabeth Giese, the Director of the Michigan Project on Equal Education Rights has prepared a statement detailing the impact of the sex equity provisions of the 1976 Vocational Education Act in Michigan. The Michigan Project on Equal Education Rights is a vigorous and active community-based organization—a local offshoot of our national organization. The community groups participating in the project are particularly interested in job-relating training in a time of high unemployment and changing technology.

Based on our experience in Michigan, we make the following recommendations for reauthorization of the Act:

Maintain the $50,000 setaside to support at least one full-time staff person to work on sex equity in vocational education.

Continue the requirements for appropriate representation of women and minorities on state and local advisory councils.

Continue collection of data on enrollments by race and sex through the Vocational Education Data System.

In addition to Ms. Giese's statement, we would like pages 14-21 of You See The Cat Walking and pages 16-22 of the Status of Sex Equity in the Detroit Public Schools included as an addendum to our testimony. Both contain comprehensive statistics on the position of young women and men in Michigan's secondary vocational system.

We are pleased to see you taking leadership on this vital issue and hope your interest will continue. If you have any further questions or if we can be of assistance in other areas of common concern, please do not hesitate to contact us.

Sincerely,

HOLLY KNOX, *Director.*

Enclosures.

PREPARED TESTIMONY OF ELIZABETH GIESE, DIRECTOR, MICHIGAN PROJECT ON EQUAL EDUCATION RIGHTS

For today's children, economic pressures and trends in new technology mean a future vastly different from the times in which our schools' educational foundations were established. In vocational education we see the strongest and clearest reflection of the sex role stereotyping that still persists in many forms in all aspects of education.

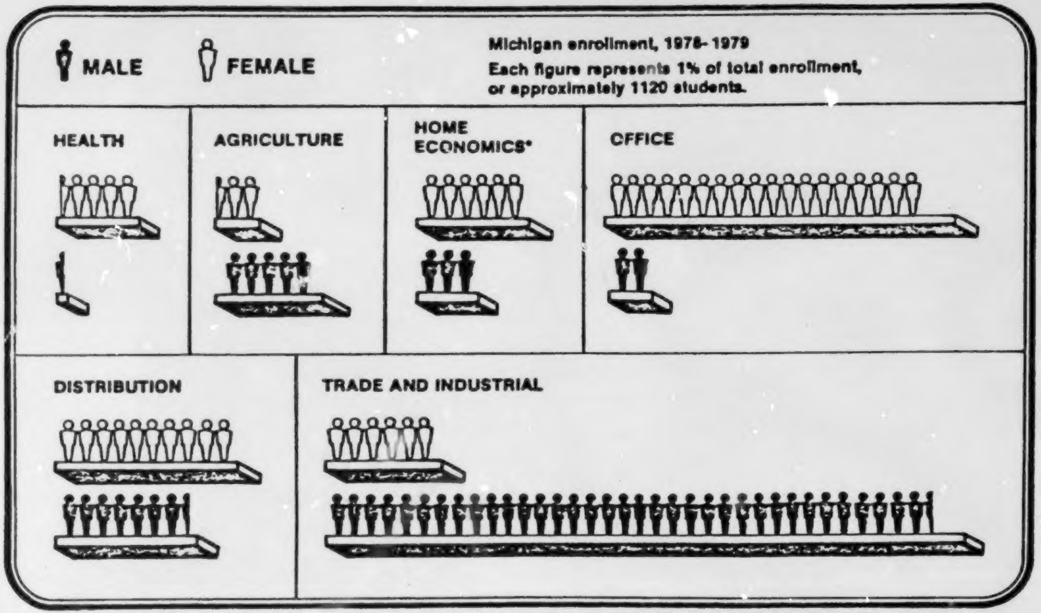
In Michigan, the vocational education system has existed on the current statewide scale for only about 20 years. But greater changes have occurred in society during that short time. Many of the patterns and practices developed over the last two decades as vocational education has grown in Michigan have served to further limit the options and opportunities of girls and boys.

The federal priorities set down in the sex equity provisions of the 1976 Vocational Education Act has led to many new programs and activities to overcome bias and stereotyping at the local level. In order to continue this work, the sex equity provisions must be maintained and strengthened in any new reauthorization of the Act.

Over the past three years the Project on Equal Education Rights (PEER) has developed in Michigan a pilot project to help citizens learn about their local schools (K-12) and to look at how sex bias and discrimination has affected the education of our children. Our observations at both the state and local level indicate that sex role stereotyping still operates to prevent students from recognizing the wide range of vocational-technical options.

In December 1980, we issued a comprehensive report documenting the status of women and girls in Michigan's public schools. The report, You See the Cat Walking: A Report on the Findings of the Michigan Project on Equal Education Rights, revealed traditional patterns of enrollments in high school vocational programs. We found that young women accounted for 47 percent of the students in occupationally-related programs in 1978-79. However, male high school students dominate the vocational technical courses leading to entry into either high paying jobs or post-secondary training programs which promise high wages in the future. Women remain clustered in programs leading to traditional female occupations. More than 38 percent are preparing for office occupations and about 14 percent are preparing for child care and home economics-related occupations.

TRADITIONAL PATTERNS PREVAIL IN SECONDARY VOCATIONAL EDUCATION

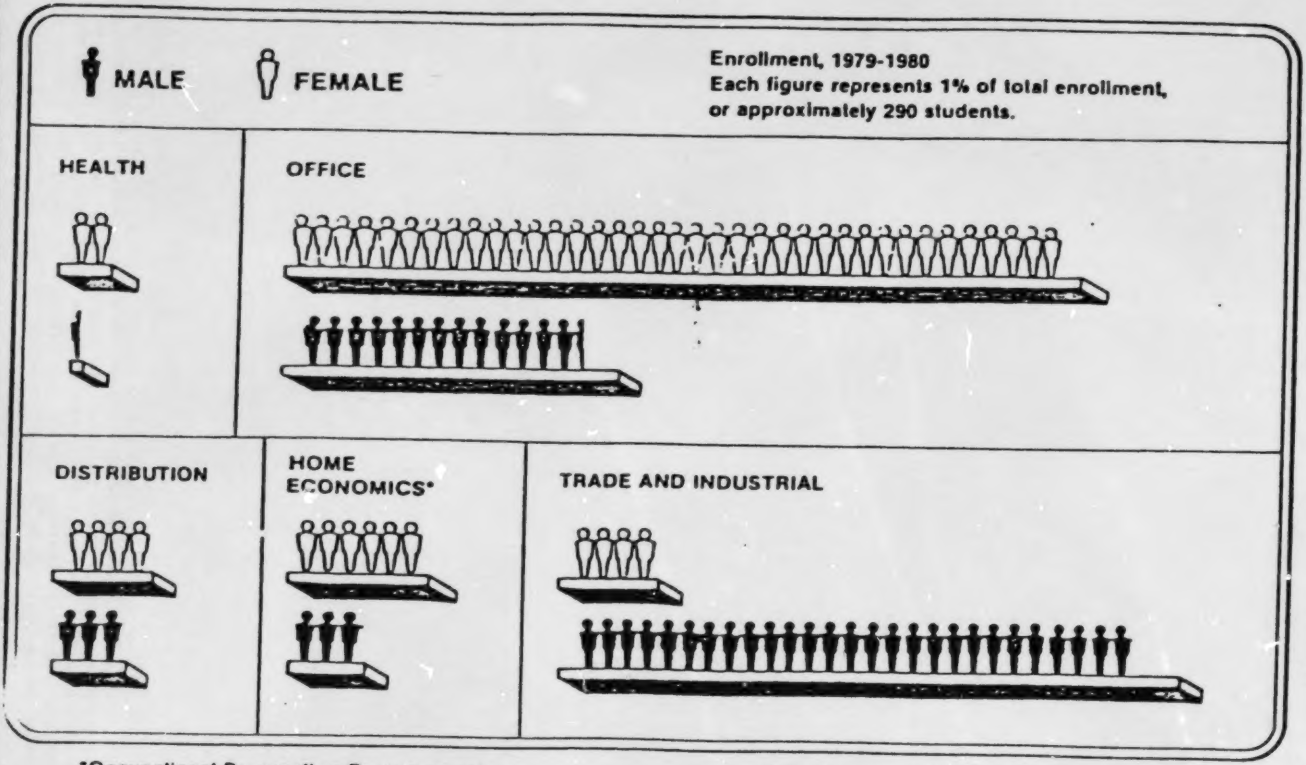


Michigan enrollment, 1978-1979
Each figure represents 1% of total enrollment, or approximately 1120 students.

*Occupational Preparation Programs only

Data Source: Michigan Department of Education

In the largest school district in Michigan—Detroit—the stereotyping was evident, as it was in all districts where local PEER groups looked at their schools. About 30 percent of the females in vocational education are in non-job-related programs and almost half, 49 percent, are in office programs.



Enrollment, 1979-1980
Each figure represents 1% of total enrollment, or approximately 290 students.

*Occupational Preparation Programs only

Data Source: Detroit Public School System

A 1979 study completed for the State Advisory Council for Vocational Education pointed out a partial explanation for this continued sex segregation in vocational programs. While staff surveyed during the study indicated that teachers felt students were being encouraged to enroll in non-traditional programs, only 18 percent of the students felt they had been encouraged to pursue training in an area non-traditional for their sex. Supporting statistics in Detroit show only seven percent or 2,804 students were enrolled in non-traditional classes.

Perhaps Michigan has been a typical state regarding our accomplishments related to achieving sex equity as measured by enrollment data. Certainly we have not achieved this goal nor the goals of PEER to truly eliminate barriers to equal options and opportunities for both girls and boys in education. However our state is currently involved in many activities which we hope will bring our vocational program closer to this goal. Most of these activities have been undertaken because of the federal requirements of the Vocational Education Act.

In our state, our full-time vocational education sex equity coordinator, Dr. Sara Lincoln, has held her position for just three years. During that time she began the state's "Lighthouse" program, a program which organizes and involves school staff—counselors, teachers, administrators—in developing and implementing activities to overcome sex bias in the schools.

Each school district participates in the Lighthouse project voluntarily. So far, 49 Career Education Planning Districts (CEPDs)—the state is divided into 53 CEPDs—have participated in the project. Next year, the vocational sex equity projects will reach all the CEPDs.

This reaching out is obviously a slow process. Each CEPD has many school districts; there are 570 school districts in Michigan. The Lighthouse Recruitment Models are now at 64 sites. Obviously it will be some time before the activities of the sex equity coordinator reaches all school districts and all students.

In addition, since the vocational education activities are aimed at seventh and eighth graders, it will be at least four years before we can begin to judge the progress of these programs by such measures as course enrollments.

Since there is so much work still to be done, we urge Congress to continue support for the provisions for at least one person to work full-time on sex equity. It is clear that in order to complete the activities and processes now underway, we must be able to rely on the sex equity coordinator. We are asking for the opportunity to carry on the programs until we are sure that all students have a sex fair education.

One of our concerns with the possibility of the government withdrawing support for sex equity mechanisms in education is that it would be so wasteful. So much time, effort and money have been put into the educationally sound sex equity projects we currently have in place that it seems tremendously wasteful to now consider retracting them. We are asking that Congress stand by programs they have helped institute through regulatory requirements so that the work of the last three years will not be wasted and to provide much needed continuity in educational programs at the local level.

As a locally-based organization in Michigan, we would like to testify as to the usefulness of the vocational education statistics collected by the federal government. In any successful business the products and process are measured numerically. To us it is a very basic requirement that the educational system should be able to tell us how many students are taking what programs. These statistics have helped document inequities which are present due to sex, race or handicap—facts which for lack of data may previously have been disputed. These statistics help citizens measure progress and hold the educational system accountable.

The Vocational Education Data System (VEDS) forms are an excellent vehicle for collecting and reporting data and each year the process becomes easier at the local level. However, in discussing this issue with the state Voc-Tech planning department, Dr. Lola Jeffries-Jackson points out that some of the analysis and level of detail required in vocational planning goes beyond the actual needs of the department and duplicates the information provided on VEDS forms. This is one area where, while cautioning against throwing the baby out with the bath water, the data analysis and reporting load might be lightened.

Another facet of the Vocational Education Act that has worked well is the requirement for hearings on the annual plan and accountability report. In Michigan the Department of Education has gone beyond the minimal requirement. There are four public meetings at which criticisms and suggestions for the plan are given. These are held at geographically diverse locations. Until recently four hearings were also held around the state once the plan had been developed. (Now because of funding cuts only the single required hearing can be held.) This planning process has led to a constantly evolving and improving state plan which includes the input of local educators and citizens.

During those hearings no one has testified against the regulations; definition of "appropriate representation" of women and minorities on vocational education advisory councils, according to the hearings' coordinator. The state of Michigan has willingly complied with this regulation and PEER feels it is important to the democratic participation of citizens in all states. While Michigan would probably continue its efforts to ensure "appropriate representation" this requirement is necessarily mandatory so that all citizens will be guaranteed this right to participation in local and state education.

In summary, PEER supports present regulations requiring a full-time sex equity coordinator with full funding of the $50,000 designated to support the sex equity coordinator's functions. Women and minorities should continue to be ensured "appropriate representation" on both state and local vocational education advisory councils. Present sex equity provisions in the Vocational Education Act continue to be needed and should be reauthorized to provide programmatic continuity at the local level and to prevent waste of the time, effort and money already invested in educationally sound programs that are as yet only partially instituted.

Excerpt From the Status of Sex Equity in the Detroit Public School System, a Report on the Findings of the Detroit Project on Equal Education Rights, September 1981

VOCATIONAL EDUCATION

Vocational education programs will be responsible for preparing young poeple for the new technological job market that is currently developing. It is necessary to prepare both male and female students so they can compete for these jobs based on their skills.

According to the Women's Bureau of the U.S. Department of Labor nine out of 10 young women graduating from high schools today will be employed outside their homes for 25 years if they marry and have children, 35 years if they marry and have no children and 45 years if they remain single. In 1978, 48 percent of all married women were in the paid labor force: 47 percent of all married white women; 58 percent of all married Black women; 44 percent of all married Hispanic women.

The proportion of black families with two or more income producers is shrinking. In a recent 10 years the rate for black families fell to 48 from 58 percent. In the same period the comparable rate for white families rose to 56 from 52 percent. About four of every 10 black families nowadays is headed by a female. A decade ago the ratio was only one in four. The income of a family headed by a female, whether minority or white, tends to be a lot lower than a family with a male breadwinner.

These statistics speak to the need to prepare young women for more than the role of homemaker, yet 30 percent of the females in vocational education are in home economics courses that do not lead to jobs. (This figure includes the consumer education program requirement for all ninth graders.) The figure of 59 cents for every $1 is still valid in reference to earnings of females and males. Minority women earn less than any other group of workers. In 1977 the median income of white male workers was $15,230; for minority males, $11,053; for white females, $8,787; and for minority females, $8,383. The goal should be equal pay for equal skills and work.

Male students as well as female students need to be able to take advantage of the valuable life skills information available to them through such courses as home economics and family life. All students need a basic understanding and knowledge of those things that affect their decisionmaking process in the market place.

It is economically wise to encourage students to explore the educational options available to them through vocational courses, especially the nontraditional options. Nontraditional careers for either men or women are those in which very few of the opposite sex are found, such as female telephoine linepersons or male secretary/receptionists.

Training for nontraditional careers will mean an opportunity to earn higher wages, especially for women. For both women and men it will mean more experiences for working together and learning that role expectations need not hinder their job options.

What is being done

Expanding Vocational Options Program.—The Michigan Department of Education provided funds for the school year 1979-80 for Recruitment Model Projects designed to eliminate sex stereotyping and to increase male and female enrollment in courses considered nontraditional for their sex. In cases where the project impacted upon

Junior High School students, the intent was to increase male and female interest in vocations—careers considered nontraditional for their sex. Each project was implemented in three stages:

1. revision of vocational brochures and other guidance materials;
2. inservice sessions for staff members;
3. involvement of students in use of sex equity materials.

There were four high schools in the Detroit Public School System involved in the program: Pershing High School, Southwestern High School, Central High School and Cooley High School.

The program's intent was to interest schools in incorporating the Expanded Vocational Options materials into other course work such as career or consumer education classes.

Vocational Technical Centers.—According to vocational education instructors surveyed in the Vocational Education component of the Desegregation Court Order there is a general belief that the quality of vocational education has declined since court-ordered desegregation began in 1975. This is significant because there was a specific provision in the court order for improvement of existing programs.

As part of the desegregation plan for the Detroit Public Schools Judge Robert E. Demascio ordered the construction of five area vocational schools.

One of the five centers, the Ethelene Crockett Center located on Mack Avenue, is in operation and health occupations, graphic arts, commercial arts, commercial photography and business machine maintenance are taught there.

There are three others still under construction with plans for two of those to open in September of 1981 and the Aerospace Center to open in 1982. Since the three newest buildings will be named after men we hope the aerospace center will be named after a woman. We suggest The Bessie Coleman Aerospace Center after the first licensed black pilot. (See Appendix.)

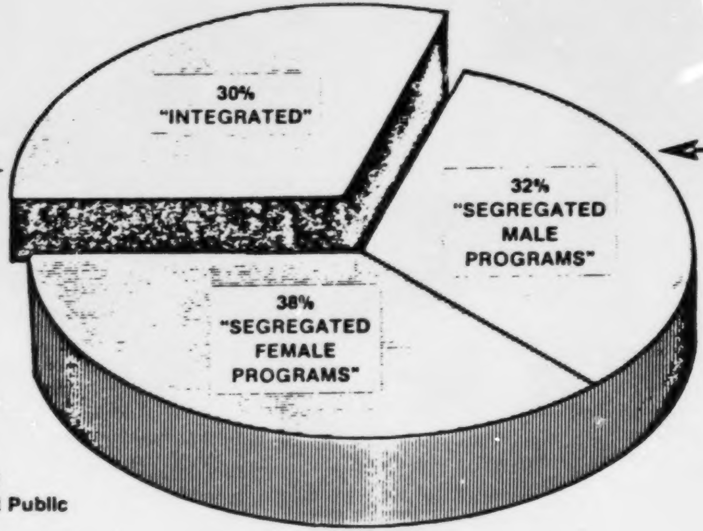
General Superintendent Dr. Arthur Jefferson appointed Area Vocational Committees to develop educational specification plans for the Centers, each of which will provide training to approximately 7,000 eleventh and twelfth graders.

These centers have the potential to train both boys and girls for a large number of job options that will allow them to compete in the job market.

What PEER found

Sex Sterotyping.—Students are still being encouraged to enter primarily traditional courses for boys and girls. The percentages speak for themselves. In 1978 there were 16 courses that were predominately male, 15 predominatly female and six that were 100 percent male. One group is said to "predominate" when there is 80 percent or more of either females or males. The figures for the school year 1979–80 showed an increase in courses where enrollment of males or females is predominant. There were 25 for males and 30 for females. There were eight courses that were 100 male and three that were 100 percent female.

SEGREGATED PROGRAMS PREDOMINATE



30% INTEGRATED PROGRAMS

Defined as programs which are not segregated.

70% SEGREGATED PROGRAMS

Defined as programs in which more than 80% of students are either male or female.

78 Programs
Michigan 1979-1980
Data source: Detroit Public Schools System

The chart on the previous page shows that only a small number of programs—23—are programs with at least an 80-20 "balance" of females and males.

About 2,804 students, or 7 percent were enrolled in nontraditional classes. Students who are in courses dominated by the other sex are called pioneers or nontraditional students because they are trying out a program not usually taken by students of their own sex. Courses such as carpentry where there are 79 males and one female or an office procedure course where 98 females and nine males are entolled are examples of students taking nontraditional classes. Courses virtually closed to students of the nontraditional gender are:

1979-80

Courses 100 percent Male.—Body and Fender; Specialization, Auto; Power Plant; Blueprint Reading; Sheet Metal; Refrigeration; Apprenticeship Guidance; Industrial Education Co-op.

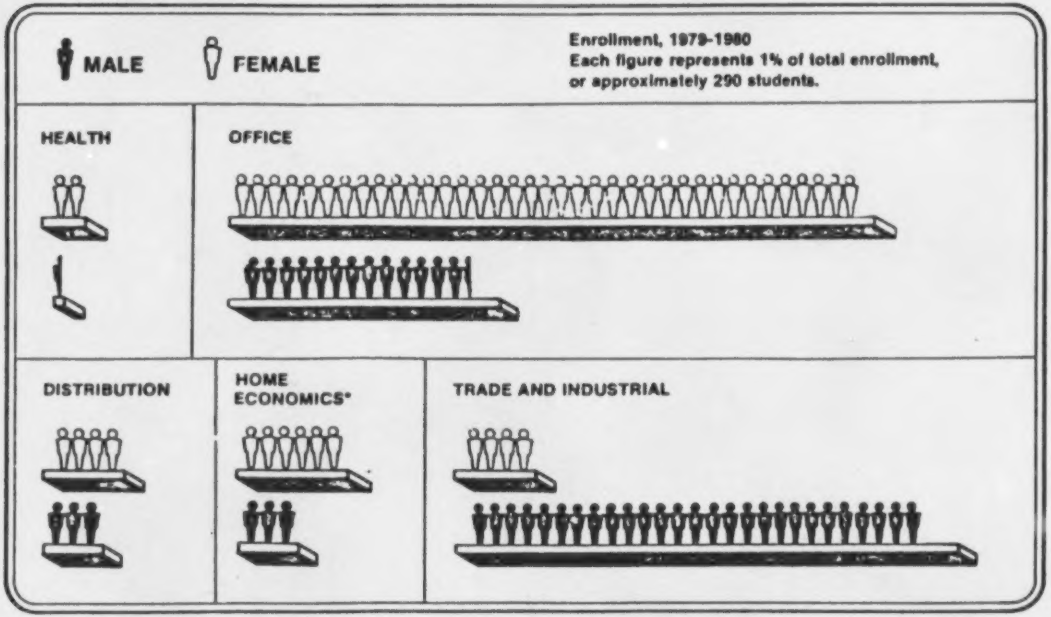
Courses 100 percent Females.—Health Occupations Cluster; Non-occupational Home Economics: Child Development; Family Health.

In 1978, Market Opinion Research did a study for the Michigan Women's Commission which revealed that Michigan women do show an interest in training for nontraditional occupations. Twenty-five percent of the women surveyed indicated they were very interested.

In response to the question, "If government-funded training or retraining were available to train you for a nontraditional occupation how interested would you be in participating in this?", 55 percent of the black women and 23 percent of the white women responded they would be very interested. In a breakdown by area 44 percent of Detroit women and 30 percent of the women from both outstate cities and the Detroit surburbs responded positively.

Recent staff surveys showed teachers felt students were being encouraged to enroll in non-traditional training programs, but only 18 percent of the students felt they had been encouraged to pursue training in an area nontraditional for their sex. The State Advisory Council for Vocational Education contracted for this study of Detroit Public Schools in March of 1979. The chart on the next page shows how traditional patterns prevail.

TRADITIONAL PATTERNS PREVAIL IN SECONDARY VOCATIONAL EDUCATION



Enrollment, 1979-1980
Each figure represents 1% of total enrollment, or approximately 290 students.

*Occupational Preparation Programs only

Data Source: Detroit Public School System

Almost half, 49 percent, of the females taking vocational education are in office programs. It is the largest program offered through Detroit Public Schools vocational education with 14,535 enrollees including 4,621 students in an office business program.

There are 29,013 students in the occupational preparation vocational education program. There are an additional 10,671 students in home economics courses which do not prepare students for jobs. This includes a consumer education program required of both girls and boys in the ninth grade. About 30 percent of the females and 23 percent of the males in vocational education are in non-job-related programs.

Trade and Industrial programs are those most likely to lead to well-paying jobs in the future. However, females are only 16 percent of the enrollees (⅓ of whom are in Cosmetology). They found in significant numbers in only three of the programs: Cosmetology (374/f-26/m), Criminal Justice (280/f-353/m) and Drafting Occupations (255/f-1,967/m).

Other Negative Stereotypes.—Vocational Educational Department heads stated in the June 1978 Progress Report of the Vocational Education Component of the Desegregation Court Order that they do not perceive counselors as positively encouraging students to consider vocational education and careers. Also there has been some feeling that maladjusted and less academic students are programmed in vocational education.

In the "March 1979 Report of the Student Selection Criteria Committee for the Detroit Area Vocational Technical Centers" this problem was also addressed. The committee concluded that if the vocational technical centers are to become viable training centers, the counterproductive dumping ground image must be changed.

Peers and parents many times play a key part in discouraging students from being pioneers in vocational programs. It is necessary for the schools to involve the community in an educational program to help people understand that vocational education programs prepare students not only for jobs that pay well, but help them develop marketable skills that give them possible opportunities to go into training programs after graduation from high school.

What people told us

Aerospace Teacher: "We don't have a problem with sex discrimination in my classroom because we don't have any girls."

Teacher: "All males do not need the same kind of activities. Kids (male and female) are different. The important ideas are opportunity and choice for all students, both male and female."

PE Teacher: "Classes are not closed, few students elect to enroll as nontraditional students in 'traditional' male or female classes."

Counselor: "I'm trying to get as many female career speakers in nontraditional jobs as possible to talk to students about jobs."

Student: "I have not done anything to achieve sex equity in my school."

What should be done

While the new vocational technical centers are certain to reduce the negative attitude toward vocational education, lingering negative attitudes must be dealth with continually just as the issue of sex equity and the need for encouraging males and femals to go into the nontraditional careers must be acted upon continually.

The Student Selection Criteria Committee feels a trend must be established whereby the centers are perceived by educators, students, parents and those involved in business and industry as institutions with high standards of training that lead to successful employment.

There must be a working relationship developed with the school system and business and industry to provide placement opportunities. PEER's concern is that these joint efforts of business and industry to assist in developing training programs will continue to reinforce sex bias in education and the workplace unless it is consciously part of the plan to provide equal options and opportunities for both girls and boys.

As was stated earlier, it is important that community education on the vocational education programs must be provided by the school system so a better understanding of the benefits and advantages can be gained.

It is recommended that the school system provide more indepth inservice for counselors and vocational education staff to ensure that they provide equal access to all courses by both boys and girls. The school system should also monitor course enrollments more closely and check on where there is a need to encourage recruitment of more males and females.

Because it is economically wise to prepare students for the technical job market of the future, career classes should also share the responsibility for exposing students to a variety of job options.

Recommended criteria for students admission to the Vocational Technical Centers should include positive steps to insure that applicants are aware of their right to equity in admission and that they are judged fairly without regard to sex, race or handicap.

Finally, we recommend that the aerospace center be named after a woman. We nominate Bessie Coleman for this honor because she was the first licensed black pilot.

American Civil Liberties Union of Cleveland, Inc.,
Cleveland, Ohio, December 15, 1981.

Representative Carl Perkins,
Chair, House Subcommittee on Elementary, Secondary and Vocational Education, U.S. House of Representatives, Washington, D.C.

Dear Representative Perkins: During the past twenty months, the ACLU of Cleveland has been examining sex equity in Ohio's vocational education programs. Under a grant from the Ford Foundation, we have been mointoring the implementation of Federal laws and looking at enrollments. We are currently working with several local groups and schools to encourage sex equitable practices.

Enclosed is a report on our monitoring. The basic conclusion that can be drawn from our reserach is that sex equity is still an unrealized goal in vocational education.

Problems exist at many levels. On the state level, planning in general and sex equity planning in particular has been haphazard. For example, in the 1981 Plan for Vocational Education, sex equity was dealt with in an appendix written by the sex equity supervisor. There was no indication that anyone else in the State's Division of Vocational Education paid any attention to sex equity.

The State's 1982 Plan included sex equity goals and activities for each program area. Although it is too soon to see definite results, such planning should have an impact on sex sterotyping.

Our study also examined local schools to find out how well sex equity activities were being implemented. One portion of the study consisted of a questionnaire to every district in Ohio. With a response rate of 18 percent, we found that 73 percent of schools were not in compliance with the requirements of Title IX of the Education Amendments of 1972. For example, 27 percent of schools had not examined their counseling procedures or materials for sex bias; 31 percent had not conducted the required self-examination to determine if any of their practices were discriminatory.

We found that enrollments in vocational programs continue to be along sex-stereotyped lines. To cite one example, 14.3 percent of students enrolled in Trade and Industry programs were females; of these, however, 47 percent were in cosmetology programs leading to low-paying, dead-end jobs.

Perhaps the most distressing part of our research was the on-site interviews. Although these were not scientifically conducted, the interviews provided a good example of what one can find by simply talking at random to vocational students.

These students believe that guidance counselors give different career advice to males and females. An alarming number of students don't know where to get information on careers. Female students tend to believe they will work 15 to 20 years of their lives, apparently unaware that the average work-life of a woman with two children is now twice that long—34 years.

Thus, our research indicates that we are failing to prepare our young people for today's society. Females and males alike need to be prepared to work outside as well as inside the home.

I encourage the Subcommittee on Elementary, Secondary, and Vocational Education to maintain and improve the sex equity provisions of the Vocational Education Amendments. Vocational education is one means by which females can break out of the "pink-collar ghetto" they now inhabit. Efforts at the state level can trickle-down to the local level and to individual students. The maintenance of the requirement for full-time personnel is especially important, as is the use of incentive grants.

Someone from this office would be happy to be present in Washington when your subcommittee conducts hearings on this subject on December 16 and 17.

Sincerely yours,

Eileen Roberts, *Executive Director.*

Enclosure: "Sex Equity in Vocational Education: A Report on Ohio's Schools."

SEX EQUITY IN VOCATIONAL EDUCATION: A REPORT ON OHIO'S SCHOOLS, MAY 1, 1981

INTRODUCTION

The American Civil Liberties Union has a history of active involvement in the fight to extend the rights granted by the United States Constitution to women. This involvement has taken many forms, from informal attempts to resolve complaints of discrimination to litigating many of the landmark Supreme Court decisions. As one facet of this commitment to equal opportunity for women, the ACLU nationally began to take a critical look at the vocational preparation of women.

Why is vocational education important for women? Why should the ACLU—or anyone concerned about sex equity issues—be concerned about vocational education?

A look at some statistics recently compiled by the Council of Chief State School Officers begins to answer these questions:

The earnings of women who are employed full time were still 60 percent of those of men in 1979.

Women college graduates earn less than men with an eighth-grade education.

One in five families with children under age eighteen is headed by a single parent; 87 percent of these are headed by women.

Two of every five single-parent families live below the povery level.

Among families with children under age eighteen headed by white females, 34 percent live below the poverty level. For black families, the figure is 58 percent.

Ninety percent of girls in high school today can expect to spend a major portion of their adult lives working for wages.

The average wife who works full time outside the home contributes 38 percent of her family's income.

At present rates, 40 percent of all marriages will end in divorce.

If these trends continue, "the poverty population will be composed solely of women and their children by about the year 2000," according to the National Advisory Council on Economic Opportunity.

A major factor in women's economic condition is their over-representation in what has been called "the pink-collar ghetto": in 1979, the job categories of clerical and sales personnel, operators in factories and service workers accounted for 73 percent of all women workers. These occupational groups are lower paying than those in which males predominate. In 1978, the median income of male craft workers was $14,837; the median income of female clerical workers was $8,440.

Even when the major issues of wasted individual potential and personal satisfaction are set aside, the facts are that schools must begin to prepare women to be wage earners and men to share in homemaking responsibilities.

As an educational program that teaches entry-level job skills and homemaking skills, vocational education has the potential to help change the figures cited above by preparing students for the realities of the world they face after graduation.

Under a grant from the Ford Foundation, the ACLU of Cleveland, Inc.'s Vocational Education Project set out to examine how well the state of Ohio and its local schools are complying with legislation designed to promote the goal of equal educational opportunity.

SEX EQUITY IN EDUCATION: THE FEDERAL COMMITMENT

After hearing extensive testimony that women and girls were being systematically discriminated against by educational institutions, federal legislators passed two laws during the 1970s to prohibit discrimination on the basis of sex by schools receiving federal funds.

Title IX of the Education Amendments of 1972, which was to be fully implemented by 1978, states: "No person in the United States shall on the basis of sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance. . . ."

The greatest effects of Title IX are on the local schools, where discrimination on the basis of sex in counseling, admissions, course offerings, financial aid, athletics, support services, benefits and other educational activities is prohibited.

In 1976, the Vocational Educational Amendments (VEA 76) became law. These amendments include extensive provisions for sex equity and state that the elimination of sex bias and sex stereotyping is a purpose of Federal Vocational Education funds.

The greatest impact of the VEA 76 is on the state level. Each state receiving federal funds for vocational education is required to hire full-time personnel to address sex equity. States are also required to provide services for displaced homemakers. Expenditure of federal funds for other programs relating to sex equity is permitted, but not required.

Other provisions of the VEA 76 include set-asides for special populations, such as the disadvantaged and handicapped and aid to economically depressed areas. Each state is required to develop five-year plans for vocational education in order to receive federal funds. The first one covered 1977–1982. This plan is updated annually, and an accountability report documenting progress towards five-year goals is prepared. Plans and progress reports should include sex equity programming.

These documents must be made available to the public for input and criticism. At least one public hearing must be held before the plan is submitted to the U.S. Department of Education.

The Vocational Education Project used three approaches to assess how well Ohio schools are complying with the requirements of these two pieces of legislation. State documents, including the current five-year plan and 1981 annual plan, were examined; a questionnaire was sent to individual school districts; and on-site interviews were conducted. All three approaches revealed that progress has been slow and that schools are failing to comply with some of the most basic sex equity requirements.

THE STATE PLAN

An examination of Ohio's 1981 Plan for Vocational Education and 1979 Accountability Report reveals that the planning process in general and the coordination of sex equity components in particular have been haphazard.

Overall, the plan consists largely of computer printouts with little or no narrative or explanation. There is extensive documentation of the numbers of students entrolled in vocational programs and projections on numbers expected to be enrolled in future years, but there is no rationale for the specific types of programs to be offered. Little explanation is offered for changes from the five-year plan.

Major problems in the area of sex equity include:

1. Although the state has used incentive grants for model programs in sex equity, only the federally-mandated $50,000 has been allocated for support of full-time personnel to address this issue.
2. Ohio has budgeted funds for day care but has not spent them. No needs assessment has been done.
3. $400,000 has been budgeted for Displaced Homemakers, but there is no plan: no indication of needs assessment, no projections on the number of persons to be served, no indication as to geographical location, no rationale.
4. Under VEA 76, funding of new and innovative programs must give priority to sex equity. Three such programs were funded in 1979; there is no mention of sex equity in these programs.
5. As described in the plan, the Career Education Program, designed to promote positive attitudes toward employment and to provide for career exploration, does not include a plan for addressing sex equity. All of Ohio's funds for Exemplary Programs go to support Career Education.
6. The sex equity coordinator reported on two Title IX reviews. Of the 770 educational agencies that were asked to respond to the first review, only 523 replied, and only 270 of these gave enough data to indicate compliance. The second review had a better response rate (511 out of 702), and 441 indicated compliance. There is no indication of how Title IX reviewing will be improved or enforced.
7. Sex equity is discussed in an appendix written by the sex equity coordinator. If the state is going to produce a meaningful and useful planning document, then each section of the plan should address sex equity.

THE PROJECT QUESTIONNAIRE

In order to examine steps taken toward sex equity on the local level, the Vocational Education Project sent questionnaires to 660 school districts in Ohio. One hundred-nineteen completed questionnaires were returned. Of this number, eighty-eight schools (73 percent) indicated non-compliance with at least one Title IX requirement. Of the responding districts:

31 percent had not conducted the required self-examination to determine if there are sex-discriminatory practices.

27 percent had not examined counseling materials and procedures to insure nondiscrimination. An additional 20 percent did not answer the question.

19 percent do not provide continuing notification of Title IX protections to the community, school, personnel and students.

12 percent would honor a sex-specified request for a student-employee, while an additional 16 percent would either post the request or send all qualified students for interviews—both strategies which acquiesce to the discriminatory request.

In addition to data on Title IX compliance, schools were also asked to provide enrollment figures by sex for each of their vocational courses. Courses were categorized by program area, yielding the results below. For purposes of comparison, the figures compiled by Ohio's sex equity supervisor in March 1979, are also provided:

	Enrollment		Percent		
	Male	Female	Male	Female	1979 percent female
Agriculture	2,001	469	81.0	19.0	21
Business and office	512	4,267	10.7	89.3	90
Health	50	490	9.3	90.7	
Distributive/retailing	848	1,146	42.5	57.5	53
Home economics	2,194	7,047	23.7	76.3	82
Trade and industry and technical	8,472	1,418	85.7	14.3	[1] 13
OWE/OWA	2,349	1,242	65.4	34.6	
Total	16,360	16,039	50.5	49.5	

[1] Does not include technical.

A look at enrollments in specific programs reveals even greater disparities. Of the 1,418 females in the Trade and Industry and Technical area, for example, 671 are in cosmetology courses. Only 41 females are in Industrial Arts courses, as compared to 1,682 males. In fact, in the Trade and Industry and Technical service areas, only seven of thirty-eight courses have more than a 25 percent female enrollment: Basic Auto (non-vocational), Telecommunications, Cosmetology, Graphic and Commercial Arts, Radio Broadcasting, Restaurant Management, and Diversified Cooperative Training. Thirteen of the thirty-eight have less than a 5 percent female enrollment. Thus, the vocational programs that lead to the higher-paying jobs are still predominantly male.

In contrast, male students are enrolling in home economics courses in larger numbers. Eight out of twenty-three courses have more than 25 percent male enrollment (five of these are now more than 50 percent) while seven have less than 5 percent male students. Two home economics courses—Home Remodeling and Basic Cooking—had 100 percent male enrollment. It is also interesting to note that Single Living courses attract a 78 percent male enrollment.

In general, then, responding school districts still have very sex-traditional enrollments in vocational programs, and more males are in traditionally female courses than females in traditionally male courses. Schools are failing to comply with Title IX requirements that could have an effect on these patterns.

ONSITE INTERVIEWS

To get a clearer picture of day-to-day practices, interviews were conducted at several schools with administrators, teachers, counselors and students. Students were also asked to complete a questionnaire. The interviews were conducted at two suburban schools and two vocational schools within Cleveland City Schools.

Some general statements can be made about findings common to all the systems. Administrators, particularly principals, are aware of sex equity issues and of Title IX and VEA 76. They tend to believe that peer and parental pressure are responsible for the continuing traditional vocational enrollments and believe that school personnel are well equipped to counsel and/or teach nontraditional students.

In spite of the fact that they have little or no experience with nontraditional students, guidance counselors and teachers tend to believe that nontraditional students are not as well prepared to do the course work. They also believe that nontraditional students are teased or harassed by other students. Few counselors or teachers have had sex equity training.

At three schools, the majority of teachers and counselors were aware of some sex equity activities in their schools: new brochures and recruitment literature, textbook reviews for bias, and the opening of classes to both sexes were the most frequently mentioned changes. At one school, none of the teachers were aware of any activities.

Interviews with students reveal that they are not receiving adequate information about career opportunities. Generally, they are handed a brochure that lists the vocational offerings and little, if any, further discussion takes place. It is disturbing to note that both males and females tend to believe that guidance counselors give different career advice to males and females. A significant minority of students said they would not know where to go for more information on nontraditional jobs.

Students were also asked about the encouragement—or lack of it—they received to enter a nontraditional program. While those in traditional programs were generally neither encouraged to or discouraged from taking a nontraditional program, all but one of the nontraditional students had received encouragement from family or school personnel. Students said the primary reason they were in their programs was because they liked the work.

An interesting finding was that both males and females in the suburban schools were less likely to be interested in higher-paying nontraditional jobs than students in Cleveland Public Schools. Most students believed they would feel comfortable in a class where they were the only one of their sex, but most of those students who said they would not be comfortable in this situation had already been in it.

CONCLUSIONS

There is still a great deal of work to be done before sex equity in education becomes a reality. In alarming numbers, schools are failing to comply with anti-discrimination regulations. Teachers and counselors are not being trained in how to avoid steering students into sex-stereotyped careers and how to make nontraditional students comfortable in their classrooms.

Better and more information on careers is needed by students and by their parents. Especially in urban areas, students need to know earnings potentials before enrolling in a program.

While the primary focus of the Vocational Education Project has been on sex equity, it is important not to forget the quality of vocational programs. Investigation of how vocational graduates are perceived by employees is needed.

As the types of jobs available become increasingly technical—only about 17 percent of jobs in the '80s will require a college degree—vocational training will become more important. Members of the community must help insure that their schools are providing a relevant, high quality vocational program in a nondiscriminatory manner.

The vocational education system can be responsive to the concerns of those it serves if those concerns are made known loudly and clearly. The A.C.L.U.'s Vocational Education Project will continue to address issues of quality of programs and of discrimination and stereotyping. The Project staff is interested in working with other groups or individuals concerned about vocational education. We can be reached at (216) 781-6276.

American Civil Liberties Union of Cleveland, Inc.
Cleveland, Ohio, January 8, 1981.

Representative Carl Perkins,
Chairman, House of Representatives, Committee on Education and Labor, Subcommittee on Elementary, Secondary and Vocational Education, Washington, D.C.

Dear Representative Perkins:

Thank you for including our report, "Sex Equity in Vocational Education: A Report on Ohio's Schools" in the record of the December hearings on the Vocational Education Amendments.

Enclosed is additional testimony, including specific recommendations for legislation, that we would like to have included in the record if possible.

Thank you for your continuing interest in this important issue.

Sincerely yours,

Eileen Roberts, *Executive Director.*

Enclosure.

PREPARED STATEMENT OF THE AMERICAN CIVIL LIBERTIES UNION OF CLEVELAND

INTRODUCTION

During the past twenty months, the American Civil Liberties Union of Cleveland, Inc.'s educational arm, the American Civil Liberties Union of Cleveland Foundation, Inc., has been studying the issue of sex equity in vocational education. The Vocational Education Project has been monitoring the implementation of sex equity provisions of the Vocational Education Amendments of 1976, examining enrollment trends, interviewing persons associated with vocational education and working with local schools to encourage sex-fair practices.

All of the Project's work leads to the conclusion that sex equity in vocational education remains an unrealized goal. We concur with the findings of the Congressionally mandated NIE study of sex equity in vocational education, which concluded, "Although there has been some progress made toward sex equity in vocational education, women's participation in programs that are nontraditional for their sex remains markedly low." Further, we believe that federal, state, and local governments can and should maintain and/or implement activities to alter traditional enrollment patterns.

NEED FOR FEDERAL INVOLVEMENT

Sex bias, stereotyping and discrimination exact a heavy toll on the nation's economy. The National Advisory Council on Economic Opportunity has projected that, "the poverty population will be composed solely of women and their children by about the year 2000."

Statistics compiled by various federal sources illuminate some of the reasons for this gloomy prediction:

The earnings of women employed full-time are still 60 percent of men's earnings.

Women college graduates earn less than men with an eighth grade education.

Two of every five single-parent families live below the poverty level. Eighty-seven percent of single-parent families with minor children are headed by women.

While outright discrimination in hiring, pay and advancement certainly contribute to these figures, the over-representation of women in what has been called the pink-collar ghetto contribute to women's poverty. In 1979, the job categories of clerical and sales personnel, operators in factories, and service workers accounted for 73 percent of all women workers. These occupational groups are lower paying than those in which males predominate. For example, the median income of male craft workers was $14,837 in 1978, compared to $8,440 for female clerical workers.

Since 90 percent of girls in high school today can expect to spend a major portion of their lives—more than 30 years—in the work force, we must begin to prepare them for gainful employment. The alternative is widespread suffering. The problem requires a federal commitment.

RECOMMENDATIONS AND DISCUSSION

1. Rather than supporting the general operation of vocational programs Federal funds should be targeted to support Federal priorities

Federal monies supply a small percentage of vocational education operating costs. In Ohio, for example, federal funds supplied 7.3 percent of the 1980 budget for vocational education. Since the concept of vocational education is firmly established, it would be a more efficient use of resources to use federal funds for national priorities. State and local governments are likely to continue to support vocational education.

2. Planning requirements should be maintained and local advisory councils should be given responsibility for sex equity planning

Two national studies (The NIE study and one by the National Advisory Council on Vocational Education) showed that where sex equity efforts have been the strongest, nontraditional enrollments have been highest.

While enrollment changes in Ohio have been minimal, planning efforts, especially in sex equity, have also been minimal. Overall, Ohio's annual plans have consisted of voluminous computer printouts with little narrative or explanation. There has been extensive documentation of enrollments and projections of future enrollments, but no discussion of why particular programs are being offered.

Beginning with 1982, planning for sex equity has improved. For the first time, the 1982 Plan included sex equity goals for each vocational education objective. The State Board of Education has established a goal of increasing nontraditional enrollments in Vocational education by 2 percent per year. Thus, there is a new move at the state level to implement planning for sex equity. This new trend needs continuing federal support.

3. Funding of full-time personnel to address sex equity should be maintained at the $50,000 level; the mandated functions should be maintained

The Vocational Education Project conducted interviews with administrators at several schools in the Cleveland area. These interviews indicate that the administrators, particularly building principals, are aware of Title IX and of sex equity concerns, largely through the efforts of the state's sex equity supervisor. For such a small investment, the sex equity supervisor is having a broad impact. Maintenance of the full-time personnel requirement will permit state sex equity personnel to continue to build on the foundation of awareness that has been laid.

Planning of state-wide activities for sex equity can be best handled by one person. If responsibilities for sex equity are spread among other personnel, the results will be a haphazard, incoherent sex equity effort.

The ten functions mandated by the 1976 Amendments provide a reasonable framework for ensuring that sex equity is properly addressed.

4. States should be required to establish incentive grants to develop programs to overcome sex stereotyping and bias in vocational programs. The results should be widely disseminated

Personnel at local schools have repeatedly told our Project that when the government is serious about something, it puts money behind it. The biggest complaint we have received about Title IX from education administrators is that there is no money behind it. State administrators of vocational education can convince local schools of the seriousness of sex equity only by making money available.

Incentive grants put money in the hands of local schools who can best determine what actions are needed to promote sex equity in their own areas.

5. States should be required to provide services to persons such as displaced homemakers, teenage parents, recipients of public assistance, and single heads of household, who suffer economic hardships due to sex stereotyping and discrimination. "Services" must include an assessment of the need for child care and provision of this service where needed.

Many sources support the need for and the wisdom of providing services to persons such as displaced homemakers.

Ohio began offering such programs in 1981. First-year results show that prior to entering displaced homemaker programs, 92 percent of the students were receiving some form of public assistance. Only 9 percent were employed. Upon completion of the program, 59 percent were employed, and 65 percent planned to get further training. Displaced homemaker programs are having a positive impact and should be continued.

This a clear need for child care services. For example, an Ohio program designed to assist women in finding nontraditional employment concluded, "Child Care was a key factor, and when it was provided, our program became phenomenally successful . . . We strongly recommend that no similar program be commenced without child care services."

6. A funding formula should be provided which requires states to give priority to economically depressed areas, especially urban areas

The nation's poor, concentrated in urban areas, are those in greatest need of job training. Those in economically depressed areas are also the people least able to pay for the training and support services that would enable them to join the work force.

Again, since the bulk of the nation's poor are women, funding priority for economically depressed areas has serious ramifications for sex equity.

7. Data collection requirements should be maintained

These requirements not only allow for enforcement of legislative provisions, but also ensure that state vocational administrators have a sound basis for planning.

8. Funding priority should be given to new program areas

Indications are that only 17 percent of available jobs in the 1980's will require a college degree. Increasingly, employment opportunities will be in technical fields. One only need think about the burgeoning field of home computers to realize that a revolution is taking place in the work place.

As the nature of our economy shifts from a manufacturing to a service and technical base, we have an excellent opportunity to promote true equality in the work place. We can take this opportunity to encourage females and males to enter vocational programs in these areas before they become heavily sex stereotyped.

9. Federal funds should be available for Career Education

The Vocational Education Project's interviews with students revealed that most are woefully ignorant of career opportunities. Counseling remains inadequate. Most often, students receive a brochure describing the school's vocational offerings, but receive little to no further career guidance. With little information, students often make decisions that will influence their economic condition for years to come.

10. States should be required to consider enrollments as a factor in allocating funds between secondary and post-secondary institutions

Forty-three percent of all women enrolled in vocational education in Ohio in 1979 were in short-term adult courses. A report by the Ohio Advisory Council for Vocational Education indicates that, "Adult education numbers are continuing to grow larger in school districts as well as technical colleges. Secondary students in vocational education may not increase appreciably in this decade because there are declining numbers of high school age youth."

These trends will be occurring nationally as the population continues to age. States should be encouraged to pay attention to this trend when allocating funds.

CONCLUSION

The work of the Vocational Education Project has confirmed the belief that equal educational opportunity is a vital aspect of quality education. High quality programs will attract students of both sexes and all races when the effects of past discrimination are remedied. When dangerously obsolete ideas about "proper" employment are removed, when students are given realistic information about the world of work, they are free to choose educational programs based on their interests and abilities.

Equal access to education is too important to leave to states. Reports on implementation of Title IX and the Vocational Education Amendments of 1976 show that states will not take this responsibility without a federal incentive.

PREPARED STATEMENT OF SHIRLEY SANDAGE, PRESIDENT, DISPLACED HOMEMAKERS NETWORK, INC.

(Endorsed by the following organizations: Federation of Business and Professional Women; Federation of Organizations for Professional Women's Clubs; National Association of Social Workers; National Commission on Working Women; National Community Action Agencies; National Council of Catholic Women; National Council of Jewish Women; National Council on Aging; National Senior Citizens Law Center; National Women's Party; National Women's Political Caucus; Older Women's League; Rural American Women; Women's Equity Action League; and YWCA of the U.S.A., National Board.)

The Board of Directors of the Displaced Homemakers Network, Inc. believes that economic self-sufficiency through employment is the single most important factor to solving some special needs of a growing group of middle-life and older women.

We are in agreement with the testimony presented during the two days of hearings urging retention and strengthening those sections of the Vocational Education Act that lead to elimination of sex bias in occupational skills training. We are submitting the following statement to underscore the special needs of older women and to urge improved access for this group.

The Displaced Homemakers Network, Inc., organized in 1978, is a national nonprofit organization of displaced homemakers, displaced homemaker service providers, and other supporters. The organization's purposes are to work toward the economic self-sufficiency through employment of displaced homemakers, and to provide resource materials for and communication linkage among programs and members. In this capacity we feel strongly about the reauthorization of the Vocational Education Act.

Reauthorization and appropriate funding of the Vocational Education Act is vital to the job preparation and training for millions of displaced homemakers who find themselves forced into the labor market in order to survive. These are women—generally over the age of 35, and most often older—who have remained at home for a number of years to care for their families and then lose their means of support through death of the spouse, separation, divorce, or ineligibility or pending disqualification for public assistance. They are too young to collect Social Security, do not qualify for unemployment insurance, and are unable to collect under a husband's pension plan. They cope with personal, family, and economic crises at the same time. In their shift from dependency to self-sufficiency they must upgrade their skills and acquire training to prepare them for gainful employment.

By conservative estimate, there are over four million displaced homemakers in the nation. Although their personal situations vary depending upon their age and family status, the majority of these women have similar basic needs. These women need jobs in order to survive. To enable them to get these jobs they require transitional support services and training that will make them marketable in an increasingly competitive job market. Younger displaced homemakers often have children to support. The needs and special problems of single parent families are many. More often than not the economic situation for the female single parent is bleak, particularly if she is having to enter the labor market for the first time. For women over 40, who make up 75 percent of the displaed homemakers in the our nation, the situation is even worse.

For the older displaced homemaker the combination of discrimination on the basis of age, sex, and race continues to be catastrophic. Although mid-life women, ages 45 to 64, who are divorced, separated or widowed, are more likely to be working than are mature married women, the salaries and jobs that both groups get will still be at the bottom of the occupational ladder. Eighty-percent of all working women are concentrated in low-paying, low-benefit jobs. While the average woman earns 59 percent of the average man's wages, women over the age of 45 (one-third of all working women) earn only 55 percent, and the gap widens with age. These jobs—in clerical fields, as household help, or as aides in medical institutions—often mean long hours, low pay, and little gratification. Poverty and hardship seem a cruel prize to earn after years of devotion to the home and family.

Poverty for most older women reflects a lifetime of a very special pattern: marriage as opposed to educational advancement, children instead of careers, part-time or sporadic employment with little or no security or retirement pension. The socioeconomic profile of today's older women results from what was not done to provide equity for women in their young and middle years. Elderly women are a growing segment of our population, growing faster than the aging population as a whole. The needs of women alone in our society are not going to go away by attrition. By the year 2035, when today's 18 year old is 68, she will be one of an estimated 33.4 million compared to 22.4 million men in the same age category

Women live longer—approximately eight years longer than men. So most older women spend their later years as widows. In 1977 only 37 percent of women over the age of 65 were married and living with their husbands, while 74 percent of older men were married and living with their wives. Altogether unmarried women (widowed, divorced, separated, and never married) comprise 72 percent of the 4.4 million people living in poverty; and for black women, almost 40 percent of those over 65 live in poverty, indicative of the even worse economic situation for minority women.

It is imperative that opportunities be increased for displaced homemakers, particularly older and minority women, to obtain training and employment that results in both immediate and long-term self-sufficiency. It is critical for the women, for their communities, and for the nation's economy.

Although considerable progress has been made in reducing barriers to nontraditional training for women leading to higher paying jobs, less than 71 percent of enrollment in such programs is estimated to be older persons. Recent studies indicated that about 49 percent of persons 55 to 64 years old who are enrolled in educational courses do so to increase their earning power. These people are hard-working Americans who have kept themselves and their families going through some very trying economic times. They are almost always excellent employees with high attendance rates, low absenteeism, high productivity, and stability. They need a skill to offer. Those skills can be developed through vocational education programs across the country. It is vital to all Americans that these training opportunities be maintained and strengthend.

Though older persons, especially women, are underrepresented in today's labor force, current demographic and economic changes suggest that there will be a greater need for older women to remain in or re-enter the job market. We believe that reauthorization of the Vocational Education Act should guarantee equal access to federally supported training programs for this population. Further, we agree with the 1981 White House Conference of Aging Technical Committee on Employment, which recommended that publicly supported vocational education, training, and employment programs be held specifically accountable to Congress by the year 1982 for equitable assistance to all age groups or face sanctions (page 25).

In recognition of the growing numbers of middle-aged and older women seeking economic self-sufficiency, we make the following recommendations to the Subcommittee on Elementary, Secondary and Vocational Education:

RECOMMENDATIONS

Retain provisions that provide support to existing programs and services for enhanced training and retraining for older women. In particular, provide special counseling, support and information services appropriate for displaced homemakers and other older persons in job development, training, and placement.

Retain provisions that eliminate sex discrimination in vocational education adding provisions that eliminate age discrimination as well.

Provide incentives for vocational education staff development and retraining of instructors and counselors so they are prepared to assist older women to enter the labor market and upgrade their skills for higher paying jobs.

Specify vocational education needs of older persons, providing incentives for improved representation of older women in skill and new technology training. In particular, develop recruitment materials and practices that are not age-biased, reaching out to settings where unemployed and underemployed older applicants can be found. Prevent placement personnel in vocational education programs from aiding employers in screening applicants on the basis of age.

Retain the Vocational Education Data System, modifying it to better describe enrollment in courses and programs crosstabulated by sex, race, and age. Plan for use of this data to identify barriers to program utilization by older persons and to evaluate efforts to reduce these barriers.

Specify that training for older adults be conducted in institutions and agencies empathetic to the needs of older women. For example, establish them in community-based organizations with a history of serving special needs of displaced homemakers with success.

Enforce the Age Discrimination Act (ADA) in vocational education programs to assure access to work study, apprenticeship and cooperative education programs for older adults as well as for youth.

Provide incentives for State Vocational Education Agencies to take appropriate steps to remedy instances of age and sex discrimination in vocational education programs to assure access of displaced homemakers, middle-aged and older women to work study, apprenticeship and cooperative education programs.

Use language in the reauthorization of the Vocational Education Act that is consistent with other bills addressing adult training such as the Comprehensive Employment and Training Act or its successor.

PREPARED STATEMENT OF SUSAN BUCKNELL, EXECUTIVE DIRECTOR, CONNECTICUT'S PERMANENT COMMISSION ON THE STATUS OF WOMEN (PCSW)

This testimony will address both the positive impact the 1976 Vocational Education Amendments have had in reducing sex discrimination and stereotyping in vocational education and will make recommendations for maintaining and strengthening the current provisions of the act. The discussion is based on the PCSW's work in the area of vocational education.

The PCSW is a legislative agency mandated to eliminate sex discrimination through studies, public education, legislation and work with state agencies. The Commission's focus on improving the economic status of women and encouraging occupational choices of men and women to be unrestricted by sex bias has led the Commission to work extensively in the area of vocational education. In 1977, the PCSW testified on the state's first Five-Year and One-Year Plan and, again in 1978 we submitted comments on the Annual Plan and Accountability Report. For the last three years, I have served on the 108-Vocational Education Planning Committee which makes recommendations to the State Board of Education regarding the distribution of vocational education funds.

Our work has convinced us that the need to retain the focus on the elimination of sex discrimination and sex bias is critical. Clearly, statistics reveal that before the Act women were disproportionately concentrated in a few vocational areas, and generally those with a poor earnings future, but that in Connecticut, we have seen slow, but steady progress during the course of the implementation of the 1976 Amendments. Although I will argue that Connecticut's statistics indicate that the Amendments have had a positive impact, the current continuation of the lower economic opportunities for women and the apparent segregation of the labor market call for renewed efforts in these areas.

The impact of inflation on families and changes in family structure have made it imperative that women have the training and education to pursue economically viable occupations. The National Advisory Council on Economic Opportunity has indicated that "there is a 'frightening pattern' in the shifting makeup of the poverty population with increasing proportions being women, youth and minorities." The report coined the phrase the "feminization of poverty" and stated that, "Almost one female-headed family in three is poor;" compared to 1 in 18 families headed by a male. The report predicted that "The poverty population will be composed solely of women and their children by about the year 2,000."

In Connecticut, 18 percent of all families are headed by women, up from 13 percent in 1970. By 1990, women will be 50 percent of the Connecticut labor force and 2 out of every 3 mothers will be working. Yet, 80 percent of working women remain concentrated in lower paying occupations, predominantly female job areas. Under 4 percent of the state's apprentices are female and the average wage of female graduates from Voc-Tech Schools in 1978 was $3.64 compared to $4.12 for men. Women still earn 59 cents for every dollar earned by a man; and minority women suffer even more disproportionately.

Besides the economic impact of discrimination on women and the limiting effect of restricted occupational choices on young men and women, we also need to explore the way in which sex-segregation may interfere with a more effective match between occupational demand and supply. In Connecticut, there is a significant demand for skilled workers—demands which cannot be met without attracting new sources of labor and, in particular, women. The Connecticut Business and Industry Association's Report, "Unemployment in the Midst of Unfilled Jobs" has documented the need for machinists. There are similar shortages in other trades and the development of new areas, such as the high technology-electronics-computer fields, will create additional demands for a skilled labor pool, representative of all potential workers. We should bear in mind that the average age of machinists in Connecticut is 60 and by 1990 we will have 40 percent less high school graduates.

At the same time, there are tremendous shortages in areas traditionally considered "women's trades" such as clerical work and nursing.

We should, therefore, regard the need to eliminate sex-stereotyping, bias and discrimination in career choice and vocational education as a critical part of economic development. But we need to recognize that sex-stereotyping, bias and discrimination will not be eliminated without the kinds of specific efforts and mandates which are currently included in the 1976 Vocational Education mandates.

The design of the 1976 Voc-Ed Amendments was exemplary in that they revealed an understanding of what would need to be done to eliminate sex bias, stereotyping and discrimination in vocational education. They mandated states to establish a sex equity coordinator, and they mandated expenditures for displaced homemaker programs. They outlined the kind of support services, including child care that would be necessary to realistically open doors for women in nontraditional training. In the program improvement area, provision was made for grants to eliminate sex bias and for the training of teachers and counselors to address bias and for the preparation of curriculum materials. In the area of Consumer and Homemaking Education, funds may be provided only to programs which encourage the participation of both males and females and which encourage the elimination of sex stereotyping in the work of the home.

The clear policy directive was that efforts should be made to eliminate sex bias, stereotyping and discrimination and the steps to doing this were outlined. In Connecticut, we can see that these provisions have gradually begun to make a difference.

I am attaching data from the Regional Vocational Technical Schools which illustrate these facts. It should be noted that vocational enrollment in the Local Education Authorities far exceeds Regional Vocational Technical School enrollment in terms of numbers of students served statewide, but this data does provide an indication of changing patterns.

Overall, women are now 21 percent of the student population, and particularly significant, 23 percent of the 9th grade enrollment in the exploratory segments where they are being exposed to a variety of trades. When we review selected occupational areas, we can point out several trends. Clearly, programs which have been traditionally less stereotyped (drafting, food trades, graphic arts) show considerably more movement toward balance between females and males in the five year period between 1976 and 1981. Drafting, for example, was 14 percent female in 1976 and is now 27 percent female in 1981.

It is also important to note the increase of women in trades that are of critical significance to Connecticut and which have hitherto offered employment to few women. Particularly significant is the rise of female enrollment in the electronics area where women have increased from .7 percent in 1976 to 11 percent in 1981 or a 10 percent increase overall. There has been a similarly significant increase in sheet metal from .6 percent in 1976 to 19 percent in 1981, representing an 18 percent increase.

Even in those areas which have always been heavily (or entirely male), the auto trades, the machine trades and construction trades, there is beginning to be some change, although it is very slow. Women have increased in carpentry, for example, from .45 to 4 percent representing a 3.5 percent increase.

We should note that the female trades are not attracting males in any significant numbers, even in areas where there is high occupational demand. The health area was 100 percent female in 1976 and was still 99 percent female in 1981.

We might surmise that the increase of women in programs that have traditionally been less stereotyped, such as drafting may, in part, reflect the increase in numbers of females recruited to the Regional Vocational Technical Schools during this period and the natural attraction of female students to trade areas where they will not experience isolation. In addition, Connecticut data for individual schools, especially in the more traditionally male areas, indicate that encouragement of females by particular instructors has a significant impact in attracting and maintaining females in these areas.

We can suggest, therefore, that the slow progress we have seen in Connecticut has owed a great deal to the policy and programmatic initiatives implemented as a result of the Vocational Education Amendments insofar as more women have been recruited and more instructors have made conscious efforts to redress bias. We can further suggest both that the slow nature of the progress requires continuation of these initiatives, and that continuation would, indeed, continue progress in the elimination of bias and stereotype.

I might also comment here that Connecticut's Accountability Report for 1979-80 recommended as part of the vocational institution evaluations that "local advisory councils be expanded to include greater representation of women, minorities and special needs populations" and that "greater emphasis be placed on the elimination of sex role stereotyping in program enrollments and curriculum design, and that teachers should be able and encouraged to participate in more workshops, in this area."

I would like to examine the features of the 1976 Amendments and the programmatic responses in Connecticut which have been especially helpful in this area. Especially important has been the establishment of the position of Sex-Equity Coordinator and the execution of the mandates of that position. The Coordinator has collected data which has had an impact on planning and education. The Coordinator has provided practical assistance to vocational education institutions. The Coordinator has undertaken a great deal of educational work to expand knowledge and awareness of discrimination and the ways to eliminate bias. The Coordinator has been extensively involved with practical and effective program development, especially in the areas of support services for women where some recruitment programs and pre-orientation preparation programs have increased the recruitment and retention of women dramatically, up to 30 percent in some machine training courses. Extensive program development efforts have also been undertaken in displaced homemaker programs as will be described below. The Coordinator has also been instrumental in having an impact throughout the State Department of Education by reviewing general grant proposals and requests for proposals to ensure they are free from bias and will equally encourage participants without regard to sex.

The mandated expenditure on displaced homemakers, under the guidance of the Coordinator, has also had a significant impact in Connecticut. In 1979, the State Department of Education utilized $40,000 in Vocational Education Act funds to study numbers of displaced homemakers in need and services available. The report estimated there were 65,000 displaced homemakers in Connecticut. A PCSW survey in 1979 also found significant numbers of women divorced after over 12 years of marriage, 43 percent of whom experienced difficulty finding a job, and 52 percent of whom had never held a job or had worked only intermittently during marriage, whereas, 18 percent of the women married over 12 years reported that finding a job was the most difficult part of divorce. No men reported this.

Some of the factors contributing to these difficulties were identified as follows: 36 percent cited no skills as a problem, 36 percent identified "outdated skills" as a problem, 50 percent pointed to "lack of confidence," 22 percent cited the absence of counseling services, and 36 percent said they needed additional education. Only 3 percent of the women in this group were enrolled in school at the time of the survey.

It was quite clear that the earned income levels of the women married over 12 years was low, compared to the earned income of women married less than 12 years, and particularly compared to the earned incomes of men married over 12 years. Sixty-seven percent of women married over 12 years said they earned less than $10,000 annually, compared to 60 percent of women with shorter marriages. Only 37 percent of men married over 12 years had earned annual incomes under $10,000. Seven percent of women married over 12 years were receiving Aid to Families With Dependent Children or general assistance payments.

The economic impact of marital dissolution in women with longer marriages was aggravated by the facts that: (a) they had difficulty finding jobs and that, (b) the jobs they found were generally in unpaid, dead-end occupations. Twenty-three percent of those who were working were employed as service workers (compared to only 14 percent of women married under 12 years); 31 percent were in clerical jobs (compared to 40 percent of those married under 12 years); only 8 percent were in professional/technical positions (compared to 18 percent of women married under 12 years; 15.4 percent were in management/administration; 4 percent were in sales jobs; 12 percent were factory operatives; 4 percent were unskilled); and no one was in a craft or skilled trade.

The allocation for displaced homemaker programs has increased from the $40,000 which funded the study by the Counseling Center of Hartford College for Women in 1979, to $128,000 for Fiscal Year 1980-81.

The 1980-81 vocational education allocation sponsored or partially sponsored 14 projects for displaced homemakers including Hartford College for Women, Greater Hartford Community College, Manchester Community College and Howell Cheney Technical School; the New Britain YWCA and Project Find, a New Britain Community organization; Northwestern Connecticut Community College and the Chamber of Commerce of Northwestern Connecticut; the Women's Employment Resource Center of New Haven; Mohegan Community College; the Bridgeport YWCA; the Stamford Displaced Homemaker Center; and Quinnebaug Community College.

These grants were offered to programs which included (1) short term skill training, in vocational fields where women are underrepresented; (2) pre-vocational programs, including introduction to technical and/or service trades and their tools, job information, educational counseling and placement in skill training or vocational education programs and, (3) development of a model displaced homemaker center in cooperation with an existing school, college or service agency.

Special consideration was given to projects which demonstrated cooperative arrangements with agencies and service providers, involved strategies to recruit minority women and women with limited English speaking ability, included job development and follow-up, employed displaced homemakers as staff or volunteers, combined job and support services, provided child care, or attempted to ensure participation among women 35 years of age and older. Projects were funded up to an amount of $10,000.

The Commission recommended successfully that the 108 Committee increase the allocation of vocational education funds to displaced homemaker programs to $140,000. Thus, for Fiscal Year 1981-82, the following organizations will receive vocational education grants for displaced homemaker projects:

DISPLACED HOMEMAKER PROGRAMS (DVAE), JANUARY TO JUNE 1982

Hartford College/Hartford YWCA/Greater Hartford Community College: including a bilingual component and word processing	$32,500
New Britain YWCA: including a bilingual component, and machining/environmental systems	32,216
Greater Bridgeport YWCA: including a bilingual component and machine operation	32,343
Southeastern RUTS/Mohegan Community College: electronics, drafting, office skills	26,721
Northwestern Connecticut Community College/Chamber of Commerce-Torrington: including graphics, electronics, word processing	21,800
Derby Board of Education/Adult Learning Center: including career exploration	9,350

All funds are from Public Law 94-482, Displaced Homemaker category except $21,000 committed from funds earmarked for Bilingual service.

The 1982 programs funded through Vocational Education Act allocations, involve a wide mix of components including job training in traditional and non-skills, graphics, drafting and electronics. One of the programs is focused on career exploration, although others involve career exploration as part of their overall efforts. In addition, projects include support services, including peer support, individual counseling, vocational testing, preparation for the GED (high school equivalency) exam.

Besides assisting women in need, the displaced homemaker programs have helped meet labor shortages in growth areas; they have stimulated a number of agency linkages between the public education sectors and industry and have had an impact on the ongoing programs of the sponsoring agencies which, hopefully, in the long run, will help to tailor mainstream programs to the needs of this population. In addition, this year, special emphasis has been placed on bilingual support for those Hispanic displaced homemakers who have limited English speaking ability. In fact, some of the grants were partially funded through special funds for bilingual programs in combination with funds allocated for displaced homemakers. Finally, this year the PCSW will be making recommendations that special outreach be undertaken to ensure that AFDC recipients or those no longer eligible will have access to these training programs.

The focus under the basic grant on support services, including child care for women entering non-traditional occupations, has also proved important in drawing attention to the kind of career orientation, and preparation necessary to realistically break down the sex-segregation of occupations. Even though relatively small sums have been allocated to this in Connecticut, ($40,000 for the last two years) the support services programs have allowed pre-vocational training, orientation, recruitment, work world information and peer support groups in various ongoing skill training programs at Niantic prison and in various community college programs directed towards technical careers.

The program at Niantic Correctional Institution is particularly interesting since very little existed in the way of vocational education. The Voc-Ed Act funds have provided career education and training in drafting and machine work and have laid the basis for establishing a pre-apprenticeship program at the facility where the women will do 2,000 hours whilst at the facility, apprenticed to tradespeople at the facility and 2,000 with local employers once they are back in their own communities.

Considerable use has also been made of grants to eliminate sex bias under Subpart III. In 1980-81, $80,000 was allocated and in 1981-82, $50,000. Seventeen proposals in the LEA's were accepted for funding in 1980-81 and, while a variety of projects were encouraged, proposal objectives were designed with a single purpose in mind, that of the elimination of sex bias and stereotyping to meet the goals of reducing stereotypical patters of enrollment in vocational programs and in occupations for which they prepare students, encourage exploration by young men and women in non-tradition occupational fields and increase the opportunities for placement in such fields upon program completion.

Nine urban areas were identified as having high concentrations of students and unemployment. Grants up to $6,000 were available and Danbury, Hartford and Stamford applied for and received grants.

Hartford provided in-service training for staff of the Hartford Public School system, including instructors, administrators and guidance counselors. A series of workshops have been designed to examine participant sex bias and introduce information about legislation, school enrollment statistics and non-traditional job opportunities. The Hartford Board of Education seeks to insure that newly trained staff will be more receptive to their students' non-traditional career choices and will encourage students to enter fields where they can realize their full career potential.

Danbury sponsored a student awareness program with an emphasis on guidance and counseling. Students currently enrolled in vocational programs and those considering enrolling, toured vocational programs and took field trips to local businesses. Audio-visual presentations were another aspect of the programs, which were designed to increase awareness of non-traditional vocational and employment opportunities.

Stamford chose to conduct workshops for parents of middle school students. Through films, discussion and role play, parents will be encouraged to consider more carefully the influence their own sex role stereotyping has on the future career choices of their children.

Grants of up to $2,500 were available to local and regional education agencies and regional vocational technical schools. Bloomfield, Brooklyn, East Conn, Willimantic, East Hartford, Guilford, Montville, Northwestern Community College, Suffield, Wethersfield, Windham, Windsor and Regional District Nos. 4 and 10 received these grants.

The majority of the LEAs have chosen to initiate proposals for in-service training. They will be offering in-service training for vocational teachers, counselors and parents. By stressing the need to recognize and eliminate sex bias on this institutional level, session leaders will attempt to improve the quality of instruction and guidance of students, the indirect beneficiaries of these programs. It is expected that workshop participants will encourage students to explore all aspects of vocational education, including both traditional and nontraditional career preparation.

Many LEAs are incorporating the use of "Maybe Next Year" into their training programs. "Maybe Next Year" is a four-part color film workshop written and produced by Patricia Yosha under a grant from the Division of Vocational and Adult Education. The film workshop was developed to expand both professional and personal opportunities for students by examining how sex role stereotyping can affect the way parents, teachers, guidance counselors and administrators influence and direct teenagers. "Maybe Next Year" has been field tested in school and community settings and has received high evaluation from workshop participants.

Another resource used by several grant recipients is the seven session in-service training course also developed through the West Hartford Public Schools. The sessions which may be used separately in two-hour workshops or consecutively in a series of workshops, cover the following topics: anti-discrimination laws, career counseling, bias in instructional materials, language, teacher behavior, strategies for change and the sex fair classroom.

Other LEAs have preferred to tailor their programs directly to students by introducing students to non-traditional occupations and effective career guidance in various ways.

Some have created speakers programs, introducing individuals employed in non-traditional industrial and business settings to the classroom to serve as role models for students. These programs will be supplemented with films and field trips.

Others will be improving school career resources and job placement services, informing potential students of both traditional and non-traditional program options and offering basic training in assertiveness, communication skills, stress reduction and math anxiety. Still another LEA will turn a student project—photographing local working men and women, within and outside the local school system, into a slideshow and lecture to be disseminated in surrounding towns.

Some pilot projects were designed to test the effectiveness of sex equity research findings, the review and revision of present educational materials to remove offensive sex bias and the development of sex fair curriculum material for non-traditional occupational areas.

The Department funded one LEA to review the school's class materials for compliance with sex fair curriculum guidelines and to make recommendations for future school purchases.

As is evident, a wide variety of approaches have been adopted which allows for creativity at the local level and tailoring of grants to each school's needs. Under the purview of the Sex-Equity Coordinator, this diversity of grants allows an evaluation of what kinds of approaches work.

Connecticut has also allocated specific funds for sex-fair counseling to be coordinated with Guidance and Counseling and Professional Development in 1981-82 ($20,000).

The Vocational Education Act funds in Connecticut have led to the development of specific programs such as support programs for women in non-traditional occupations and displaced homemaker programs which have met the needs of specific populations, and which have also developed the expertise and impetus to have a broad impact on institutions. To some extent, these special initiatives have had an impact on general programs; for example, funding allocated in Connecticut with other agencies to provide employment and training programs matched by private industry has led to training programs which incorporate the recruitment and preparation techniques developed through support services for women in technical careers. Similarly, program improvement grants have all included a directive that the elimination of sex equity is to be a component.

Clearly, we have made progress in eliminating sex bias in Connecticut and the directives of the 1976 Voc-Ed Amendments have been key to this progress. There is still a long way to go, however. It is significant that the National Institute of Education recently released a report of a four-year study which analyzes the effectiveness of the 1976 amendments to the Vocational Education Act in meeting a number of national objectives, concluded with regard to the law's goals of achieving equity for women, the disadvantaged and handicapped:

(a) Although Congress made it clear that one of its chief priorities for vocational education was to increase access for individuals with special needs, and while the theme of equity pervades the law, much is authorized and relatively little required. In short, while the 1976 amendments strengthened some of the equity instruments in the Vocational Educational Act, they also continued to give the states a great deal of discretion over whether or not they would further this goal in the law. Technically speaking, then, states and localities could be in compliance with the letter of the law while choosing to ignore its intent.

It is Connecticut's credit that we have made progress. Based on the Connecticut experience of where we have really utilized the 1976 Amendments and where we have not, I would submit the following recommendation:

1. Retain full-time personnel to overcome sex bias. The small required set aside of $50,000 has been one of the most effective measures under this act and we urge retention. It is absolutely clear that if the full-time position is not retained, the impetus for change will be minimized. Sex-equity is an important policy issue and will not be handled effectively if it is assigned to people with other job responsibilities.
2. Continue to require a set-aside for displaced homemaker programs under the basic grant.
3. Continue to outline special vocational programs that will provide supportive services for persons who suffer economic hardship due to sex bias and discrimination in education and who because of traditional roles at home or at work cannot support themselves; and outline programs in particular that will assist the transition to non-traditional occupations. Included in this should be the designation of child care services. Rising numbers of pregnant teenagers and single female heads of households, of women re-entering the labor market or returning for adult education, make provision of child care a necessity. In Connecticut, we are beginning to obtain statistical data which indicates that the lack of dependable and affordable child care is a significant factor in education and employment dropouts.
4. Consideration should also be given to establishing a set aside or providing a state discretionary program to create incentives for local education agencies to provide programs which address the sex equity provision of the Voc-Ed Amendment. Ensuring that the Basic Grant allocations have an impact at the local level, has been a problem. Set asides or incentives would help.
5. Subpart III, Program Improvement and Support Services. Grants to eliminate sex bias should be mandatory and set asides or incentives should be considered to ensure a sex-equity focus in these areas to ensure equal opportunity to young men and women in career choice and vocational education.
6. Subpart IV, Program for the Disadvantaged. Directives for sex equity and non-traditional occupational training should be included.
7. Subpart V, Consumer and Homemaking Education. The focus on encouraging the elimination of sex stereotyping in the work of the home should be maintained as a reflection of the changing roles of men and women and because of the influence on occupational choice that parents have on children.
8. Retain the Vocational Education Data System. LEAs should continue to collect and report data on enrollments and outcomes by race and handicap and by sex within those groups. Data is a critical component of planning and evaluation.
9. Continue to require appropriate representation of women and minorities on advisory councils.
10. Target more LEA funds on disadvantaged populations and economically depressed areas, especially urban areas, to reflect the fact that men and women and minority men and women, in depressed areas in the cities, have the greatest need for targeted job training.

The importance of the 1976 Vocational Education Amendments have not just been that they provided special programs for women. The importance has been that they articulated sex-equity for men and women as a major policy goal in vocational education; and they laid out the kinds of programs and steps to implement this policy, including the kinds of special initiatives to help disadvantaged women and to help these women, in particular, to enter non-traditional programs. The regulations create the kind of initiatives that, in the long run, will make special programs for women unnecessary, as mainstream programs will eventually meet the needs of men and women for bias free vocational education.

Slow progress has and is being made. To weaken the sex-equity focus of the Amendments at this time would severely undermine this work and present an injustice to men and women in need of vocational education and to employers trying to meet their demand for trained workers.

CONNECTICUT

TOTAL ENROLLMENTS (9–12), REGIONAL VOCATIONAL-TECHNICAL SCHOOLS, OCT. 1, 1980

School	Male	Female	Total	Percent female
Ansonia—Emmett O'Brien RVTS	517	54	571	9.5
Bridgeport—Bullard-Havens RVTS	692	323	1,015	31.8
Danbury—Henry Abbott RVTS	701	159	860	18.5
Danielson—H. H. Ellis RVTS	364	79	443	17.8
Groton—Southeastern Ella T. Grasso RVTS	695	130	735	17.7
Hamden—Eli Whitney RVTS	524	226	750	30.1
Hartford—A. I. Prince RVTS	478	224	752	32.0
Manchester—Howell Cheney RVTS	414	23	437	5.3
Meriden—H. C. Wilcox RVTS	719	118	837	15.0
Middletown—Vinal RVTS	492	154	646	23.8
Milford—Platt RVTS	555	210	765	27.4
New Britain—E. C. Goodwin RVTS	734	157	891	17.6
Norwich—Norwich RVTS	554	134	688	19.5
Stamford—J. M. Wright RVTS	560	202	762	26.5
Torrington—Oliver Wolcott RVTS	514	153	667	22.9
Waterbury—W. K. Kaynor RVTS	581	144	725	19.9
Willimantic—Windham RVTS	471	31	502	6.7
Total RVTS	9,475	2,521	11,996	21.0

TOTAL EXPLORATORY ENROLLMENT (9TH GRADE), REGIONAL VOCATIONAL-TECHNICAL SCHOOLS, OCT. 1, 1981

School	Male	Female	Total	Percent female
Ansonia—Emmett O'Brien RVTS	150	15	165	10
Bridgeport—Bullard-Havens RVTS	160	110	270	41
Danbury—Henry Abbott RVTS	181	44	225	20
Danielson—H. H. Ellis RVTS	93	27	120	23
Groton—Southeastern Ella T. Grasso RVTS	167	59	226	26
Hamden—Eli Whitney RVTS	132	73	205	36
Hartford—A. I. Prince RVTS	135	73	208	36
Manchester—Howell Cheney RVTS	107	8	115	7
Meriden—H. C. Wilcox RVTS	189	30	219	14
Middletown—Vinal RVTS	142	37	179	21
Milford—Platt RVTS	184	80	264	30
New Britain—E. C. Goodwin RVTS	214	62	276	22
Norwich—Norwich RVTS	134	36	170	21
Stamford—J. M. Wright RVTS	209	36	245	15
Torrington—Oliver Wolcott RVTS	145	35	180	19
Waterbury—W. K. Kaynor RVTS	191	61	252	24
Willimantic—Windham RVTS	130	20	150	13
Total	2,663	806	3,469	23

ENROLLMENT COMPARISON, OCT. 1, 1976 AND 1981—SELECTED OCCUPATIONAL AREAS—RVTS IN CONNECTICUT

Occupational areas	Number of programs, 1981	1976				1981				
		Female	Male	Total	Percent female	Female	Male	Total	Percent female	Percent change
Air-conditioning	5		239	239		8	533	541	1.4	+1.4
Auto body	8	2	249	251	0.8	6	264	270	2.0	+1.2
Auto mechanics	17	8	824	832	.96	21	754	775	3.0	+2.0
Beauty culture	13	521	14	535	97	619	11	630	98.0	
Carpentry	17	4	866	870	.45	27	735	762	4.0	+3.5

ENROLLMENT COMPARISON, OCT. 1, 1976 AND 1981—SELECTED OCCUPATIONAL AREAS—RVTS IN CONNECTICUT—Continued

Occupational areas	Number of programs, 1981	1976				1981				
		Female	Male	Total	Percent female	Female	Male	Total	Percent female	Percent change
Architic, drafting	4	11	116	127	9	32	79	111	29.0	+20.0
Machine drafting	17	77	461	538	14	191	510	701	27.0	+13.0
Electrical	17	2	887	889	2	24	748	822	3.0	−1.0
Electronics	17	7	752	759	.9	91	717	808	11.0	+10.0
Fashion design	5	170	1	171	99	175	1	176	99.0	
Food trades	7	73	162	235	31	155	178	333	47.0	+16.0
Graphic arts	8	68	264	332	29	177	173	350	51.0	+22.0
Machine tool	16	17	1,234	1,251	1	49	1,169	1,218	4.0	+3.0
Plumbing	13	1	467	468	.2	9	522	531	1.7	+1.5
Sheetmetal	4	1	148	149	.6	21	129	150	19.0	+18.0
Health	4	133		133	100	148	1	149	99.0	−1.0

Note: The program chosen for comparison are those which enroll at least 100 students and which are offered in at least 4 schools.

FULL ACCESS AND RIGHTS TO EDUCATION COALITION,
CENTER FOR PUBLIC ADVOCACY RESEARCH, INC.,
New York, N.Y., January 11, 1982.

Representative CARL D. PERKINS,
Chairman, Subcommittee on Elementary, Secondary and Vocational Education, Committee on Education and Labor, House of Representatives, Washington, D.C.

DEAR REPRESENTATIVE PERKINS: On behalf of the Full Access and Rights to Education (FARE) Coalition—a coalition of twenty five organizations in New York City concerned with the education of female youth—I am writing to offer evidence regarding the need to sustain federal efforts to promote sex equity in vocational education programs.

Enclosed please find information detailing the enrollments by sex for New York City's 21 vocational/technical high schools for the current and past two years. Though some progress has been made in desegregating formerly single-sex schools and programs, it is clear that overwhelming imbalances remain and that both young women and young men continue to be channeled into those schools offering courses traditional for their sex. As is indicated in the table provided, 17 of the 21 schools currently have enrollments of 84 percent or more of one sex.

It is also evident from past experience that without federal initiatives local school boards and state education agencies will not take the steps necessary to provide equal opportunities for their vocational education students. Legislation such as the 1976 Amendments to the Vocational Education Act must be maintained in order to ensure that inequities such as those present in New York City's vocational schools do not persist.

Sincerely,

TRACY HULING, Chair.

Enclosures.

STUDENT ENROLLMENT BY SEX FOR NEW YORK CITY'S VOCATIONAL/TECHNICAL HIGH SCHOOLS [1]

	Male	Female	Total
BRONX			
Alfred E. Smith:			
1979-80	2,086	4	2,090
Percent	99.8	0.2	100
1980-81	2,285	9	2,294
Percent	99.6	.4	100
1981-82	1,800	0	1,800
Percent	100	0	100
Grace H. Dodge:			
1979-80	150	1,866	2,016
Percent	7.4	92.6	100

STUDENT ENROLLMENT BY SEX FOR NEW YORK CITY'S VOCATIONAL/TECHNICAL HIGH SCHOOLS [1]—Continued

	Male	Female	Total
1980-81	157	1,803	1,960
Percent	8.0	92.0	100
1981-82	170	1,801	1,971
Percent	8.6	91.4	100
Jane Addams:			
1979-80	5	1,499	1,504
Percent	.3	99.7	100
1980-81	16	1,610	1,626
Percent	1.0	99.0	100
1981-82	31	1,604	1,635
Percent	1.9	98.1	100
Samuel Gompers:			
1979-80	1,027	14	1,041
Percent	98.7	1.3	100
1980-81	1,087	40	1,127
Percent	96.5	3.5	100
1981-82	1,322	74	1,396
Percent	94.7	5.3	100
BROOKLYN			
Alexander Hamilton:			
1979-80	1,021	111	1,132
Percent	90.2	9.8	100
1980-81	1,053	112	1,165
Percent	90.4	9.6	100
1981-82	1,168	131	1,299
Percent	89.9	10.1	100
Automotive:			
1979-80	1,636	1	1,637
Percent	99.9	.1	100
1980-81	1,626	3	1,629
Percent	99.8	.2	100
1981-82	1,579	1	1,580
Percent	99.9	.1	100
East New York:			
1979-80	1,541	40	1,581
Percent	97.5	2.5	100
1980-81	1,337	46	1,383
Percent	96.7	3.3	100
1981-82	1,429	49	1,478
Percent	96.7	3.3	100
Eli Whitney:			
1979-80	906	1,441	2,347
Percent	38.6	61.4	100
1980-81	802	1,435	2,237
Percent	35.9	64.1	100
1981-82	838	1,404	2,242
Percent	37.4	62.6	100
George Westinghouse:			
1979-80	2,026	131	2,157
Percent	93.9	6.1	100
1980-81	1,959	132	2,091
Percent	93.7	6.3	100
1981-82	1,821	101	1,922
Percent	94.7	5.3	100
William E. Grady:			
1979-80	1,978	27	2,005
Percent	98.7	1.3	100
1980-81	1,803	37	1,840
Percent	98.0	2.0	100

STUDENT ENROLLMENT BY SEX FOR NEW YORK CITY'S VOCATIONAL/TECHNICAL HIGH SCHOOLS [1]—Continued

	Male	Female	Total
1981–82	1,738	34	1,772
Percent	98.1	1.9	100
William H. Maxwell:			
1979–80	11	1,702	1,713
Percent	.6	99.4	100
1980–81	20	1,691	1,711
Percent	1.2	98.8	100
1981–82	49	1,649	1,698
Percent	2.9	97.1	100
MANHATTAN			
Art and Design:			
1979–80	1,327	923	2,250
Percent	59.0	41.0	100
1980–81	1,462	933	2,395
Percent	61.0	39.0	100
1981–82	1,380	874	2,254
Percent	61.2	38.8	100
Chelsea:			
1979–80	1,190	0	1,190
Percent	100	0	100
1980–81	1,028	0	1,028
Percent	100	0	100
1981–82	1,062	5	1,067
Percent	99.5	.5	100
Fashion Industries:			
1979–80	177	2,220	2,397
Percent	7.4	92.6	100
1980–81	171	2,156	2,327
Percent	7.3	92.7	100
1981–82	228	2,149	2,377
Percent	9.6	90.4	100
Mabel Dean Bacon:			
1979–80	0	1,277	1,277
Percent	0	100	100
1980–81	0	1,370	1,370
Percent	0	100	100
1981–82	2	1,352	1,354
Percent	.1	99.9	100
Manhattan Vocational/Technical:			
1979–80	1,421	38	1,459
Percent	97.4	2.6	100
1980–81	1,237	30	1,267
Percent	97.6	2.4	100
1981–82	1,240	31	1,271
Percent	97.6	2.4	100
New York School of Printing:			
1979–80	1,361	455	1,816
Percent	74.9	25.1	100
1980–81	1,146	534	1,680
Percent	68.2	31.8	100
1981–82	1,093	552	1,645
Percent	66.4	33.6	100
QUEENS			
Aviation:			
1979–80	2,764	26	2,790
Percent	99.1	.9	100
1980–81	2,706	32	2,738
Percent	98.2	1.2	100
1981–82	2,667	46	2,713
Percent	98.3	1.7	100

STUDENT ENROLLMENT BY SEX FOR NEW YORK CITY'S VOCATIONAL/TECHNICAL HIGH SCHOOLS [1]—Continued

	Male	Female	Total
Queens Vocational:			
1979–80	640	669	1,309
Percent	48.9	51.1	100
1980–81	682	643	1,325
Percent	51.5	48.5	100
1981–82	629	592	1,221
Percent	51.5	48.5	100
Thomas Edison:			
1979–80	2,432	41	2,473
Percent	98.3	1.7	100
1980–81	2,371	59	2,430
Percent	97.6	2.4	100
1981–82	2,278	60	2,338
Percent	97.4	2.6	100
STATEN ISLAND			
Ralph McKee:			
1979–80	1,119	237	1,356
Percent	82.5	17.5	100
1980–81	1,089	231	1,320
Percent	82.5	17.5	100
1981–82	1,035	195	1,230
Percent	84.1	15.9	100
Total Enrollment:			
1979–80	24,818	12,722	37,540
Percent	66.1	33.9	100
1980–81	24,037	12,906	36,943
Percent	65.1	34.9	100
1981–82	23,559	12,704	36,263
Percent	65.0	35.0	100

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[1] Based on data from the Division of High Schools, New York City Board of Education. These statistics refer to schoolwide enrollments and do not indicate enrollments in the individual occupational programs or classes within schools.

CHANGE IN NUMBER AND PERCENT OF UNDERREPRESENTED SEX IN STUDENT ENROLLMENT FOR NEW YORK CITY'S VOCATIONAL/TECHNICAL HIGH SCHOOLS

	From 1979–80 to 1980–81	From 1980–81 to 1981–82
Bronx:		
Alfred E. Smith:		
Female	5	−9
Percent	.2	−.4
Grace H. Dodge:		
Male	7	13
Percent	.6	.6
Jane Addams:		
Male	11	15
Percent	.7	.9
Samuel Gompers:		
Female	26	34
Percent	2.2	1.8
Brooklyn:		
Alexander Hamilton:		
Female	1	19
Percent	.2	.5
Automotive:		
Female	2	−2
Percent	.1	.1

CHANGE IN NUMBER AND PERCENT OF UNDERREPRESENTED SEX IN STUDENT ENROLLMENT FOR NEW YORK CITY'S VOCATIONAL/TECHNICAL HIGH SCHOOLS—Continued

	From 1979-80 to 1980-81	From 1980-81 to 1981-82
East New York:		
Female	6	3
Percent	.8	.0
Eli Whitney:		
Male	−104	36
Percent	−2.7	1.5
George Westinghouse:		
Female	1	−31
Percent	.2	−1.0
William E. Grady:		
Female	10	−.3
Percent	.7	−.1
William H. Maxwell:		
Male	9	29
Percent	.6	1.7
Manhattan:		
Art and Design:		
Female	10	−59
Percent	−2.0	−.2
Chelsea:		
Female	0	5
Percent	.0	.5
Fashion Industries:		
Male	−6	57
Percent	−.1	2.3
Mabel Dean Bacon:		
Male	.0	2
Percent	0	.1
Manhattan Vocational/Technical:		
Female	−8	1
Percent	−.2	.0
New York School of Printing:		
Female	79	18
Percent	6.7	1.8
Queens:		
Aviation:		
Female	6	14
Percent	.3	.5
Queens Vocational:		
Male	42	
Female		−51
Percent	2.6	.0
Thomas Edison:		
Female	18	1
Percent	.7	.2
Staten Island:		
Ralph McKee:		
Female	−6	−36
Percent	.0	−1.6
Total enrollments:		
Female	184	−202
Percent	1.0	.1